

# ***2020–2021 BULLETIN OF INFORMATION***

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## University of Notre Dame Graduate School Programs and Policies



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 UNIVERSITY OF  
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# ACADEMIC CALENDAR 2020–2021

## Fall Semester 2020\*

### August

- 10: Classes begin
- 17: Last day for course changes

### October

- 9: Last day for course discontinuance
- 19: Mid-term break begins
- 28: Classes resume

### November

- 1: Application deadline for admission to the Graduate School for spring semester 2021
- 12: Last class day
- 13: Reading days begin
- 16: Dissertation and thesis formatting checks due; Final examinations begin
- 30: Last day for master's examinations and Ph.D. dissertation defenses for January 2021 graduation; All grades submitted through insideND by 3:45 p.m.

### December

- 3: Registration for spring semester 2021 begins for Graduate School students
- 7: Last day for presenting completed theses and dissertations to the Graduate School for January 2021 graduation

### January

- 3: Official graduation date (no ceremony)

## Spring Semester 2021

### January

- 12: Classes begin
- 19: Last day for course changes

### February

- 1: Last application deadline for admission to the Graduate School for fall semester 2021

### March

- 6: Mid-term break begins
- 8: Dissertation and thesis formatting checks due
- 15: Classes resume
- 17: Registration for summer session 2021 begins
- 19: Last day for course discontinuance

### April

- 2: Easter holiday begins
- 5: Last day for master's examinations and Ph.D. dissertation defenses for May 2021 graduation
- 6: Classes resume
- 12: Last day for presenting completed theses and dissertations to the Graduate School for May 2021 graduation
- 16: Registration for fall semester 2021 begins for Graduate School students
- 28: Last class day
- 29: Reading days begin

### May

- 3: Final examinations begin
- 10: All grades submitted through insideND by 3:45 p.m.
- 15: Official graduation date and Graduate School Commencement Ceremony (Class of 2021)
- 29: Graduate School Commencement Ceremony (Class of 2020)

## Summer Session 2021

### June

- 8: Dissertation and thesis formatting checks due
- 14: Classes begin

### July

- 2: Last day for master's examinations and Ph.D. dissertation defenses for August 2021 graduation
- 12: Last day for presenting completed theses and dissertations to the Graduate School for August 2021 graduation
- 23: Last class day

### August

- 1: Official graduation date (no ceremony)

\* Dates for AY 2020-2021 may be subject to change as the University adapts to COVID-19 guidance.



# GRADUATE STUDIES DIRECTORY

## Dean's Office and Administration

### Laura Carlson, Ph.D.

*Vice President and Associate Provost,  
Dean of the Graduate School*

*Professor of Psychology*

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- Voice of the Graduate School
- Innovation in graduate training
- Strategic planning and development
- Graduate program assessment
- Policy and program design

### Christal Colbert

*Dean's Assistant*

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- Officer Assistant to the Dean
- Calendaring Advisory Council (fall and spring meetings)
- Coordinate Provost committee meetings (Academic Council, ND Lead, PAC, UCWFS)

## The Graduate School Executive Committee

### Brian Flaherty

*Program Director, Strategic Initiatives*

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- Strategic planning and projects
- Student funding administration
- External fellowship administration
- Fellowship stewardship
- Professional development
- Recruiting funds to programs

### John Lubker, Ed.D.

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- Graduate School ombudsperson
- Administration of graduate school policies, procedures, and appeals
- Oversight of graduate student progress
- Graduate student leadership development and training

### Nyrée McDonald, Ph.D.

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- Graduate School recruitment
- Support departments and programs with their individual recruitment efforts and admissions
- Manage online application and recruitment system
- Student progress from matriculation through graduation

### Demetra Schoenig

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- Convene and facilitate professional development
- Network in service of Notre Dame's holistic graduate training model
- Provide oversight for the Grants and Fellowships Office, Postdoc Office, and events and communications functions
- Budget, human resources, financial policies, and operations manager
- Strategic initiatives for Provost Office

## The Graduate Studies Leadership Team

The Graduate Studies Leadership Team is a collaborative group that includes both the dean and executive committee of the Graduate School, and the following collegiate associate deans:

### Steven Corcelli, Ph.D.

*Associate Dean for Interdisciplinary Studies and Faculty Development, College of Science*

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### Margaret Meserve, Ph.D.

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## GRADUATE STUDIES DIRECTORY

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- Social media
- Graphic design
- Premium content development
- Design work for graduate programs

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- Cultivate and lead the Professional Development Network
- Initiate and implement programming that develop students' professional skills while supporting their well-being
- Collect data related to professional development initiatives

**Grants and Fellowships**

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- Representative for nationally competitive grant and fellowship programs
- Manage external grant and fellowship selection processes
- Provide strategic leadership in grantsmanship

- Guide students in identifying and obtaining successful extramural funding

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*Postdoctoral Fellow and Fulbright Coordinator, Office of Grants and Fellowships*  
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- Develop and implement programming to promote graduate student wellbeing and success
- Advise students, as well as develop and lead workshops, on the selection, application, and writing process for grants and fellowships
- Provide project management for and serve on graduate-level Fulbright review committees

**Kathryn Sawyer Vidrine, Ph.D.**

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- Oversee annual Fulbright application process
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**Postdoctoral Affairs**

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- Assist with visa questions for arriving postdoctoral scholars
- Disseminate DS-2019s to appointees for obtaining the proper Visa
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- Facilitate communication between the Office for Postdoctoral Affairs and academic hiring departments

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- Liaison to the College of Science
- Career exploration and planning
- Developing career skills and capabilities
- Career programming and professional development
- Networking with alumni and employers

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- Career programming and professional development
- Networking with alumni and employers



## GRADUATE STUDIES DIRECTORY

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- Liaison to the College of Arts and Letters and Keough School for Global Affairs
- Career exploration and planning
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- Liaison to the College of Engineering
- Career exploration and planning
- Developing career skills and capabilities
- Career programming and professional development
- Networking with alumni and employers

**Graduate Enrollment Management*****Admissions and Recruitment***

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- A-L: Application processing and admission decisions
- A-L: Immigration documentation
- A-L: Creation of live student records
- Verification of all applicant data
- Application system updates

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- Recruiting for College of Science, Engineering, Arts and Letters, and Keough School programs (Ph.D.

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- Graduate Enrollment Management

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- Recruiting for College of Science, Engineering, Arts and Letters, and Keough School programs (Ph.D. Master's), and Professional Master's programs
- Graduate Enrollment Management

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- M-Z: Application processing and admission decisions
- M-Z: Immigration documentation
- M-Z: Creation of Live student records
- Verification of all applicant data
- Slate specialist
- Slate: Manage user accounts
- Slate: One-on-One Training for program assistants/coordinators

***Current Student Support***Course audits: [gsaudit@nd.edu](mailto:gsaudit@nd.edu)Dissertations/theses: [dteditor@nd.edu](mailto:dteditor@nd.edu)**Maureen Collins***Program Director, Academic Services*(574) 631-5926; [mcollin5@nd.edu](mailto:mcollin5@nd.edu)

- Add/drops, course audits, and grade changes
- Application to degree candidacy
- E-forms
- Graduation and degree audits
- Leave of absence
- Reports (Graduate School)
- Transfer of credits

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- Doctoral dissertations and master's theses — resources and formal submissions
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- ProQuest/UMI liaison
- Graduate School email groups
- Access to OnBase, Slate (back-up)
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- Doctoral dissertations and master's theses format reviews
- Dissertation and thesis access requests
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## GRADUATE STUDIES DIRECTORY

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- Making the Notre Dame experience robust, inclusive, and vibrant for military-connected students
- Achieving excellence in undergraduate, graduate, and professional education for military-connected students
- Enabling Notre Dame to lead an exemplary model of engagement in the military and veteran space

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- Making the Notre Dame experience robust, inclusive, and vibrant for military-connected students
- Achieving excellence in undergraduate, graduate, and professional education for military-connected students
- Enabling Notre Dame to lead an exemplary model of engagement in the military and veteran space

## UNIVERSITY LEADERSHIP

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*Vice President and James E. Rohr Director of Athletics*

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## UNIVERSITY POLICIES

### Notice of Non-Discrimination

The University of Notre Dame does not discriminate on the basis of race, color, national or ethnic origin, sex, disability, veteran status, genetic information, or age in the administration of any of its educational programs, admissions policies, scholarship and loan programs, athletic and other school-administered programs, or in employment.

The University has designated the director of its Office of Institutional Equity to handle all inquiries regarding its efforts to comply with and carry out its responsibilities under Title IX and under Section 504 of the Rehabili-

tation Act of 1973. The Title IX and Section 504 coordinator may be contacted at [equity@nd.edu](mailto:equity@nd.edu) or as follows:

Karrah Miller, J.D.  
Director, Office of Institutional  
Equity  
414 Grace Hall  
University of Notre Dame  
Notre Dame, IN 46556  
(574) 631-0444

### Policies on Harassment

Sexual and discriminatory harassment and harassment in general are prohibited by the University. Definitions and policies regarding all forms of harassment and discrimination, as well as confidential resources for help, and University initiatives related to diversity and inclusion, are posted on the Office of Institutional Equity website at <http://equity.nd.edu>.

It is the student's responsibility to be aware of these expectations and conduct themselves accordingly as members of the Notre Dame community.

Questions regarding the policies and initiatives overseen by the Office of Institutional Equity may be directed to [equity@nd.edu](mailto:equity@nd.edu).

### Campus Security and Fire Safety

The security of all members of the campus community is of paramount concern to the University of Notre Dame. Each year the University publishes an annual report outlining security and safety information and crime statistics for campus. This brochure provides suggestions regarding crime prevention strategies and important policy information about emergency procedures, reporting of crimes, law enforcement services on campus, and information about support services for victims of sexual assault. The brochure also contains information about the University's policy on alcohol and



other drugs, the SafeBouND program and campus shuttle service. You may view the document on the web at: <http://ndsp.nd.edu>. A printed copy of this brochure is available by sending an email request to [ndsp@nd.edu](mailto:ndsp@nd.edu) or by writing to:

Office of the Chief of Police  
University Security Police  
204 Hammes Mowbray Hall  
Notre Dame, IN 46556

### **The Spirit of Inclusion at Notre Dame**

“Strangers and sojourners no longer.”  
(Ephesians 2:19)

The University of Notre Dame strives for a spirit of inclusion among the members of this community for distinct reasons articulated in our Christian tradition. We prize the uniqueness of all persons as God’s creatures. We welcome all people, regardless of color, gender, religion, ethnicity, sexual orientation, social or economic class, and nationality, for example, precisely because of Christ’s calling to treat others as we desire to be treated. We value gay and lesbian members of this community as we value all members of this community. We condemn harassment of any kind, and University policies proscribe it. We consciously create an environment of mutual respect, hospitality and warmth in which none are strangers and all may flourish.

One of the essential tests of social justice within any Christian community is its abiding spirit of inclusion. Scriptural accounts of Jesus provide a constant witness of this inclusiveness. Jesus sought out and welcomed all people into the Kingdom of God—the gentile as well as the Jew, women as well as men, the poor as well as the wealthy, the slave as well as the free, the infirm as well as the healthy. The social teachings of the Catholic

Church promote a society founded on justice and love, in which all persons possess inherent dignity as children of God. The individual and collective experiences of Christians have also provided strong warrants for the inclusion of all persons of good will in their communal living. Christians have found their life together enriched by the different qualities of their many members, and they have sought to increase this richness by welcoming others who bring additional gifts, talents and backgrounds to the community.

The spirit of inclusion at Notre Dame flows from our character as a community of scholarship, teaching, learning and service founded upon Jesus Christ. As the Word through whom all things were made, Christ is the source of the order of all creation and of the moral law which is written in our hearts. As the incarnate Word, Christ taught the law of love of God and sent the Holy Spirit that we might live lives of love and receive the gift of eternal life. For Notre Dame, Christ is the law by which all other laws are to be judged. As a Catholic institution of higher learning, in the governance of our common life we look to the teaching of Christ, which is proclaimed in Sacred Scripture and tradition, authoritatively interpreted by Church teaching, articulated in normative understandings of the human person, and continually deepened by the wisdom born of inquiry and experience. The rich heritage of the Catholic faith informs and transforms our search for truth and our understanding of contemporary challenges in higher education.

*This statement was adopted by the officers of the University on August 27, 1997, in conjunction with an Open Letter to the Notre Dame community.*



# THE GRADUATE SCHOOL

## The Graduate School: Your Research Matters. You Matter. Be a force for good.

**Mission Statement:** Offer holistic training for exceptional graduate students to produce scholarship that impacts the world.

**Vision statement:** Demonstrate that together scholarship and wellbeing produce impact.

### Values:

- Courage
- Empathy
- Excellence
- Inclusion
- Respect
- Service
- Strategic Action
- Teamwork

### Be a Force for Good

The Graduate School's conviction that *Your Research Matters* affirms the vibrant individuality of each graduate student: no one could approach a challenge or elucidate a finding in the exact same way that you will. It also aligns our students' work with Notre Dame's greater mission: to contribute positively to our world, whether by trailblazing innovations, pursuing

discoveries, or illuminating truth and beauty in new and unique ways.

Notre Dame's founder, Father Sorin, famously wrote that Notre Dame would be a powerful force for good in the world. We see evidence every day that he was right. Our graduate students and alumni are contributing research that matters in powerful and unique ways, every single day.

Our approach to graduate training entails telling the stories of our community members. We have confidence that their accomplishments will infuse inspiration into the work of our faculty and students as they pursue the dynamic research that occurs in the context of a holistic approach to graduate education. With a robust sense of well-being coupled with the powerful examples of Notre Dame research acting in the world, our students benefit from learning within a community of award-winning scholars, ethical innovators, and current and future leaders. With this apparatus, they have the power to use their graduate education to become a force for good.

The Graduate School has four divisions — engineering, humanities, science, and social sciences — as well as programs in the Keough School of Global Affairs, totalling over 30 departments and programs that offer master's or doctoral degrees. There are over 2,400 graduate students, from all fifty states and over 75 nations, and more than 150 postdoctoral fellows at Notre Dame. The Graduate School

is led by the Dean of the Graduate School, who is also a member of the faculty and a Vice President and Associate Provost. A team of Associate Deans and a dedicated staff work in partnership with the colleges and departments to prepare students to become future academic or professional leaders, to enter the arena of public discourse on pressing contemporary issues, to contribute to a life-affirming understanding of our world, and to embody the call of our founder Father Sorin to be a force for good.

### Graduate Student Union

Through a council of elected officers, appointed committee chairs and representatives from the departments of its constituent colleges, the Graduate Student Union (GSU) provides a variety of services and represents its membership on several University councils and committees. In particular, it promotes excellence in graduate education, advocates for the highest quality of life for graduate students, subsidizes graduate student travel to present original research, and maintains a liaison with the administration regarding pertinent issues. The GSU maintains a website with current events and resources for graduate students, provides listserv updates, works with the Graduate School to conduct a graduate student orientation program, and offers awards for outstanding teaching assistants and graduate instructors, in addition to

## THE GRADUATE SCHOOL

providing various social, cultural, and intellectual activities. The GSU is the graduate students' official liaison with the University administration and the Office of Student Activities.

The Graduate Student Union finances its operations and Conference Presentation Grant program through contributions from the Graduate School and a yearly mandatory activity fee paid by students. Graduate students are eligible to apply for the competitive grant if they: (1) are enrolled in the Graduate School, and (2) pay the annual fee.

The Graduate Student Union maintains offices at W206A Duncan Student Center.

Email: [gsu@nd.edu](mailto:gsu@nd.edu)

Telephone: (574) 631-6963

Web: <http://gsu.nd.edu>

## Graduate Degrees Granted

The Graduate School awards master's and doctoral degrees in the divisions of Engineering, Humanities, Science, and Social Sciences, and the Keough School of Global Affairs.

Master of Arts in the following fields:

- Anthropology
- Classics
- Design
- Early Christian Studies
- Economics
- English
- French
- History
- History and Philosophy of Science
- Italian Studies
- Philosophy
- Political Science
- Psychology
- Sociology
- Spanish
- Studio Art
- Theology

Master of Divinity

Master of Engineering (only with J.D.)

Master of Fine Arts in the following fields:

- Creative Writing
- Design
- Studio Art

Master of Medieval Studies

Master of Sacred Music

Master of Science in Aerospace Engineering

Master of Science in Bioengineering

Master of Science in Chemical Engineering

Master of Science in Civil Engineering

Master of Science in Computer Science and Engineering

Master of Science in Electrical Engineering

Master of Science in Environmental Engineering

Master of Science in Interdisciplinary Mathematics

Master of Science in Mechanical Engineering

Master of Science in the following fields:

- Applied and Computational Mathematics and Statistics
- Biochemistry
- Biological Sciences
- Biophysics
- Chemistry
- Earth Sciences
- Mathematics
- Physics

Master of Theological Studies

Doctor of Musical Arts

Doctor of Philosophy in the following fields:

- Aerospace and Mechanical Engineering
- Aerospace and Mechanical Engineering: Materials Science and Engineering
- Anthropology
- Applied and Computational Mathematics and Statistics
- Biochemistry
- Biochemistry: Materials Science and Engineering
- Bioengineering
- Biological Sciences
- Biophysics

- Chemical Engineering
- Chemical Engineering: Materials Science and Engineering
- Chemistry
- Chemistry: Materials Science and Engineering
- Civil and Environmental Engineering and Earth Sciences
- Civil and Environmental Engineering and Earth Sciences: Materials Science and Engineering
- Computer Science and Engineering
- Economics
- Electrical Engineering
- Electrical Engineering: Materials Science and Engineering
- English
- History
- History and Philosophy of Science
- Integrated Biomedical Sciences
- Italian
- Mathematics
- Medieval Studies
- Peace Studies and Anthropology
- Peace Studies and History
- Peace Studies and Political Science
- Peace Studies and Psychology
- Peace Studies and Sociology
- Peace Studies and Theology
- Philosophy
- Physics
- Physics: Materials Science and Engineering
- Political Science
- Psychology
- Sociology
- Spanish
- Theology

## Professional Master's Degrees

Professional master's degrees granted through the Graduate School include:

Master of Arts in Educational Leadership — limited to students in the Alliance for Catholic Education (ACE) program

Master of Education— limited to students in the Alliance for Catholic Education (ACE) program

## THE GRADUATE SCHOOL

Master of Engineering in the following fields:

Environmental Engineering  
Structural Engineering

Master of Global Affairs

Master of Science in the following fields:

Applied and Computational Mathematics and Statistics  
Data Science  
Engineering, Science, and Technology Entrepreneurship  
Global Health

### Graduate Minors

A graduate minor is defined by the Graduate School as a guided academic credit-bearing course of study that is designed to supplement work in a primary degree program with an additional substantial expertise. It is expected that the course of study will be recognized by other institutions as conferring a level of valued expertise.

Such minor programs are available only to graduate students currently enrolled in a graduate program at Notre Dame. The minor will not be awarded until all the requirements for the graduate degree have been met.

Current minors in the Graduate School include:

Computational Science and Engineering  
Gender Studies  
History and Philosophy of Science, Technology and Medicine  
Irish Studies  
Quantitative  
Peace Studies  
Psychology  
Screen Cultures

### Areas and Fields of Study

The University of Notre Dame offers graduate programs leading to master's and/or doctoral degrees in the following areas and fields of study.

Key:

\* Master's programs only  
+ Master's program and M.F.A. in studio art and design  
++ M.F.A. in creative writing

#### *Aerospace and Mechanical Engineering*

Aerospace Sciences  
Biomechanics, Biomaterials, and Bioengineering  
Computational Engineering and Mechanics  
Control Systems  
Flow Physics and Control  
Fluid Mechanics  
Manufacturing Science  
Materials Science  
Mechanical Systems and Design  
Nanotechnology  
Orthopedics and Biomedical Devices  
Robotics  
Scientific Computing  
Solid Mechanics  
Thermal and Energy Sciences  
Tissue Engineering

#### *Anthropology*

Anthropological Archaeology  
Biological Anthropology  
Linguistic Anthropology  
Social-Cultural Anthropology

#### *Applied and Computational Mathematics and Statistics*

Applied Mathematics  
Applied Partial Differential Equations  
Applied Statistics  
Astrostatistics  
Bayesian Statistics  
Bayesian Asymptotics  
Nonparametrics Statistics  
Big Data Analysis  
Bioinformatics  
Biostatistics  
Computational and Mathematical Biology  
Computational Finance  
Computational Mathematics

Computational Neuroscience  
Computational Physics  
Data Mining  
Dynamical Systems  
Environmental Statistics  
Geometry and Statistics  
Geospatial Informatics  
Machine learning  
Mathematical Modeling  
Manifold Learning  
Multiscale Modeling  
Network Analysis  
Nonlinear Dynamics  
Nonlinear Partial Differential Equations  
Numerical Algebraic Geometry  
Numerical Analysis  
Numerical Solution of Partial Differential Equations  
Scientific and Parallel Computing  
Predictive Analytics  
Probabilistic Graphical Models  
Spatio-temporal Statistics  
Statistical Learning  
Statistical Bioinformatics  
Statistics  
Stochastic Processes  
Topological Data Analysis  
Uncertainty Quantification

#### *Art, Art History, and Design\**

Studio Art+  
Ceramics  
Painting  
Photography  
Sculpture  
Design+  
Graphic Design  
Industrial Design

#### *Bioengineering*

Biomaterials  
Cellular Engineering  
Diagnostic Imaging and Imaging Probes  
Diagnostic Devices  
Immunotherapies  
Organ on a Chip  
Orthopaedics  
Tissue Engineering/Regenerative Medicine

## THE GRADUATE SCHOOL

**Biological Sciences**

Anatomy and Physiology  
 Cancer Biology  
 Cellular and Molecular Biology  
 Development and Regeneration  
 Ecology and Environmental  
 Biology  
 Entomology  
 Epidemiology and Population  
 Biology  
 Evolutionary Biology  
 Genetics and Genomics  
 Infectious and Vector-Borne  
 Diseases  
 Microbiology and Immunology  
 Neuroscience and Behavior

**Biophysics**

Biosciences  
 Computational and Statistical  
 Modeling  
 Physics

**Chemical and Biomolecular Engineering**

Batteries and Fuel Cells  
 Bioengineering  
 Catalysis and Reaction Engineer-  
 ing  
 Cellular and Tissue Engineering  
 Drug Delivery  
 Ionic Liquids  
 Materials  
 Medical Diagnostics  
 Membranes  
 Microfluidics and Nanofluidics  
 Molecular Modeling  
 Multiphase Flow  
 Nanomaterials and Nanotechnol-  
 ogy  
 Optimization  
 Polymers  
 Process Systems Engineering  
 Simulation and Theory  
 Soft Matter  
 Sustainable Energy

**Chemistry and Biochemistry**

Analytical Chemistry  
 Biochemistry  
 Biophysics  
 Drug Design and Discovery  
 Energy Research

Environmental Chemistry  
 Inorganic Chemistry  
 Materials Chemistry  
 Molecular Medicine  
 Molecular and Cell Biology  
 Nanotechnology  
 Organic Chemistry  
 Physical/Analytical Chemistry  
 Radiation Chemistry  
 Structural Biology  
 Surface Science  
 Synthetic Chemistry  
 Theoretical and Computational  
 Chemistry

**Civil and Environmental Engineering and Earth Sciences**

Actinide Material Science  
 Aquatic Chemistry  
 Bioengineering  
 Biological Treatment of Hazardous  
 Waste  
 Coastal Engineering  
 Computational Fluid Mechanics  
 Climate Variability and Change  
 Development Studies  
 Dynamics of Offshore Structures  
 Earthquake Engineering  
 Environmental Biotechnology  
 Environmental Engineering  
 Environmental Fluid Dynamics  
 Environmental Microbiology  
 Environmental Mineralogy  
 Environmental Nanoscience and  
 Technology  
 Environmental Sensors  
 Finite Element Modeling  
 Fire Effects on Structures  
 Fluid Mechanics  
 Groundwater and Surface Water  
 Hydrology  
 Geomicrobiology  
 Health and Societal Implications  
 of Nanotechnology  
 High and Low Temperature Geo-  
 chemistry  
 Kinetic Structures  
 Lunar Petrology  
 Mantle Petrology  
 Materials Characterization and  
 Durability

Metabolic Engineering  
 Multiphase Flows  
 Nanomaterial Metrology  
 Natural and Man-Made Hazard  
 Reduction  
 Nuclear Forensics  
 Progressive Collapse of Structural  
 Systems  
 Remote Sensing  
 Renewable Energy  
 Structural Dynamics  
 Structural Engineering  
 Structural Health Monitoring  
 Structural Mechanics and Design  
 Structural Reliability  
 Sustainability Engineering  
 Tall Buildings and Long-Span  
 Bridges  
 Water and Wastewater Treatment  
 Water Resources Management  
 Wind Engineering

**Classics\***

Classical Studies  
 Early Christian Studies

**Computer Science and Engineering**

AI and Machine Learning  
 Algorithms and Theory  
 Assistive Technology  
 Biometrics  
 Computer Architecture  
 Computer Vision  
 Digital Humanities  
 Human-Computer Interaction  
 Medical Imaging  
 Nanotechnology  
 Natural Language Processing  
 Network and Data Science  
 Scientific and High Performance  
 Computing  
 Security, Privacy, and Cryptogra-  
 phy  
 Software Engineering, Visualiza-  
 tion and Visual Analytics  
 Wireless, Mobile, and Embedded  
 Systems

**Economics**

Development Economics  
 Health Economic  
 International Economics

## THE GRADUATE SCHOOL

Labor Economics	Prose Fiction	Cellular and Molecular Biology
Monetary Economics and Macroeconomics	Renaissance	Neuroscience
Public Economics	Restoration and 18th Century	
	Romantic and Victorian	<b>Italian</b>
<b>Education*</b>	<b>Global Affairs*</b>	Medieval Literature
Educational Leadership	International Peace Studies	Renaissance Studies
Teaching	Sustainable Development	18th- and 19th-Century Literature and Culture
	Global Affairs + [Specialization]	Modern Literature and Culture
<b>Electrical Engineering</b>	<b>Global Health*</b>	Cartography and Literature
Electronic Material and Devices		Italian Cinema
High-Speed Circuits and Antennas	<b>History</b>	
RF to THz Electronic Devices and Systems	Latin American History	<b>Materials Science and Engineering</b>
Nanoelectronic Devices and Systems	Medieval History	Actinides - nanomaterials, fuels, recycling, and wasteforms
Optoelectronics and Photonics	Modern European History	Biomaterials - diagnostics and drug delivery
Quantum Computing	United States History	Polymers - membranes and catalysts
Biophotonics and Biomedical Devices		Quantum - semiconductors, ferroelectrics, magnetics, electronics, photonics
Intelligent Transportation Systems	<b>History and Philosophy of Science</b>	
Networked Control Systems	Analytic Philosophy of Science and Epistemology	<b>Mathematics</b>
Sensing, Detection and Estimation, and Machine Learning	Continental Philosophy of Science	Algebra/Algebraic Geometry
Error-Control Coding, Information Theory	History of Astronomy and Physics	Complex Analysis
Digital Signal Processing, Image Processing, Computer Vision	History and Philosophy of Biology	Differential Geometry
Wireless Communication and Networks	History and Philosophy of Economics	Discrete Mathematics
Robotics and Autonomous Systems	History of Mathematics	Logic
	History of Medicine	Mathematical Physics
	History of the Philosophy of Science	Partial Differential Equations
	History of Psychology	Topology
	Intellectual History of Science 1500 to 1950	<b>Medieval Studies</b>
	Medieval and Renaissance Natural Philosophy and Medicine	Art History
<b>Engineering, Science, and Technology</b>	Philosophy of Contemporary Physics	History
<b>Entrepreneurship*</b>	Science and Literature	Language and Literatures
	Social History of Medicine and Technology	Manuscript Studies
		Music
<b>English</b>	<b>Integrated Biomedical Sciences</b>	Philosophy
African American	Biophysics and Structural Biology	Theology
Creative Writing++	Cancer Biology	
Drama	Chemical Biology and Molecular Pharmacology	<b>Musical Arts</b>
Early American (to 1865)	Computational Biology and Bioinformatics	<i>See Sacred Music</i>
Irish Studies	Genomics and Proteomics	
Latino/a Studies	Immunology and Infectious Disease	<b>Peace Studies</b>
Literary Theory		Peace Studies and Anthropology
Middle American (from the Civil War to 1930)		Peace Studies and History
Modern British		Peace Studies and Political Science
Novel		Peace Studies and Psychology
Old and Middle English		Peace Studies and Sociology
Poetry		Peace Studies and Theology
Post 1930 American Literature		



**Philosophy**

Ancient Philosophy  
 Contemporary European  
 Philosophy  
 Epistemology  
 Ethics  
 Logic  
 Medieval Philosophy  
 Metaphysics  
 Modern Philosophy  
 Philosophy of Language  
 Philosophy of Mathematics  
 Philosophy of Mind  
 Philosophy of Religion  
 Philosophy of Science  
 Political Philosophy

**Physics**

Astrophysics  
 Atomic Physics  
 Biophysics  
 Condensed Matter Physics  
 Elementary Particle Physics  
 Network Physics  
 Nuclear Physics  
 Statistical Physics

**Political Science**

American Politics  
 Comparative Politics  
 Constitutional Studies  
 International Relations  
 Methodology  
 Political Theory

**Psychology**

Cognition, Brain, and Behavior  
 Clinical Psychology  
 Developmental Psychology  
 Quantitative Psychology

**Romance Languages and Literatures\***

French—Middle Ages, Renaissance, 17th-century Classical, 18th-century Enlightenment, 19th Century, 20th Century  
 Italian Studies—Italian Literature: Medieval, Renaissance, Modern; Art History; Architectural History; Film Studies; Translation; History; Philosophy; Music

Spanish—Medieval, Golden Age, Colonial Spanish-American, Modern Spanish Peninsular, Modern Spanish-American Periods; Gender Studies

**Sacred Music**

Master of Sacred Music — Choral Conducting Concentration, Organ Concentration, Voice Concentration  
 Doctor of Musical Arts — Choral Conducting Concentration, Organ Concentration

**Sociology**

Cultural Sociology  
 Education  
 Gender and Family  
 Global Sociology and International Development  
 Race and Ethnicity  
 Religion  
 Social Networks  
 Social Movements/Political Sociology  
 Stratification and Inequality

**Spanish**

Latin American and Iberian Cultural Studies  
 Film Studies  
 Literary Theory  
 Literature

**Theology**

Biblical Studies\*  
 Christianity and Judaism in Antiquity—Hebrew Bible and Judaica, New Testament and Early Church  
 Early Christian Studies\*  
 History of Christianity—Early Church, Medieval Studies, Reformation Studies, Modern Studies  
 Liturgical Studies  
 Master of Arts (Summer)  
 Moral Theology/Christian Ethics  
 Studies in Spirituality  
 Systematic Theology  
 Professional Studies\*

(Master of Divinity Program)  
 Theological Studies\*  
 Theology and Peace Studies  
 Theology and the History and Philosophy of Science Program  
 World Religions and World Church

**ACADEMIC REGULATIONS**

Please note:

The following information represents the minimum standards established by the Graduate School. Individual departments may require higher standards. Students are expected to be fully cognizant of their department's requirements.

No exceptions to the following policies and procedures will be valid without the formal written approval of the Graduate School.

**Admission to the Graduate School****Degree Applicants**

Applicants for admission to a degree program in the Graduate School must hold a bachelor's degree or its equivalent from an accredited American college or university or from a foreign institution of acceptable standing and accredited by the governing educational body of the country by the time of graduate matriculation. If at that time an admitted applicant does not hold a bachelor's degree, the Graduate School admission is void. The applicant should have earned at least a B average (3.0 on a 4.0 GPA scale) in their undergraduate major, and should meet the level of academic achievement that implies a developed ability



## ACADEMIC REGULATIONS

for advanced study and independent scholarship.

An applicant may seek admission to degree-seeking status in either a master's or doctoral program, or to non-degree status.

Admission to a graduate degree program is not equivalent to admission to candidacy for the degree. It should also be noted that admission to the master's program does not mean admission to the associated doctoral program upon completion of the master's program. A separate decision is required for admission into the doctoral program.

### Admission to Multiple Degrees

Students seeking admission to more than one program (whether they intend to enroll in only one or both programs) must submit separate applications for each program and be accepted by each. Admission to one program does not guarantee admission to another program. Applicants may seek admission to two programs prior to enrolling, or apply to an additional program after they have begun an initial program. It is possible for a student to enroll in two master's degree programs, a master's degree program and a Ph.D., or a program in the Graduate School and a professional degree in one of the other colleges or schools in the University. The Graduate School does not allow students to enroll in two Notre Dame doctoral programs simultaneously. The Graduate School will consider only applicants whose past academic performance indicates the potential for success in each of the programs. See "Transfer Credits" on page 26 for further details.

All funding arrangements and degree requirements must be approved in advance by the student's advisor (if he or she has one), the respective program

administrators, and the Graduate School.

An applicant who seeks admission to more than one master's degree program in the Graduate School in order to earn two degrees, or an applicant who seeks admission to a degree program in the Graduate School concurrently with a degree program in another school in the University (i.e., Law School, the School of Architecture, or Mendoza College of Business) must submit a separate and complete application for each program. The applicant must also be accepted by each of the cooperating departments. The Graduate School will consider only applicants whose past academic performance indicates the potential for success in each of the programs. In consultation with the appropriate advisors from each unit, the applicant will select a plan of study acceptable to all units. The Graduate School must approve the written plan of study before the student may begin the program. See "Transfer Credits" on page 26 for further details.

### Admission to Joint Degree Programs

It is possible for a student to pursue a program of study combining two programs and leading to a joint degree. An applicant who seeks to earn a joint degree, either master's or Ph.D., must submit a separate and complete application to each program and be accepted by both. The relevant departments must agree upon a plan of study defining what will constitute the joint degree program, and the approved written plan must be on file with the Graduate School before the student may begin the program.

### Application Requirements

An applicant for admission to a degree program must complete all of the following:

1. Complete and electronically submit the online application
2. Submit a statement of intent through the online application system
3. Submit a curriculum vitae or resumé through the online application system
4. Arrange for three (3) letters of recommendation to be submitted through the online recommendation system associated with the online application
5. Submit unofficial transcripts from each post-secondary institution through the online application
6. Submit writing samples, if required by the department, through the online application system
7. Submit the application fee by credit card, check, or money order using the payment system associated with the online application system
8. If applicable, arrange for the submission of official Graduate Record Examination (GRE) General Test scores
9. If applicable, arrange for the submission of official GRE Subject Test scores if required by the program
10. Arrange for submission of official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores if the applicant's native language or

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language of college instruction is not English

The online application may be accessed through the Graduate School's website at <http://graduateschool.nd.edu>. Students who have preliminary test scores are encouraged to upload them to the application to expedite the review process.

Students seeking admission to more than one program must submit separate applications for each program.

The application fee must accompany the application. This fee is nonrefundable, and may be paid by check, money order, or credit card (see online application for the current application fee).

Application deadlines range from December 1 to February 1 for admission to the following fall semester. Applicants may visit the Graduate School's website to determine the deadline for individual programs. Unless otherwise specified, the application deadline for spring admission varies from October 1 through November 1. Applicants may visit the Graduate School's website to determine the deadline for individual programs. It should be noted that only a few departments offer spring admission. Therefore, applicants who wish to begin in the spring are advised to consult the department prior to submitting an application.

Beyond these Graduate School admission requirements for all graduate departments and programs, particular programs may require personal interviews and/or submission of special materials, such as portfolios, a supplemental department application, an autobiographical statement, etc. Applicants should consult the individual department or program to learn about additional requirements and submission procedures.

The Graduate Record Examination (GRE) is offered at sites in the United States and abroad. The annual schedules and other information about the GRE can be obtained online at <http://www.gre.org> or from Educational Testing Service (ETS), Graduate Record Examination, Box 6000, Princeton, NJ 08541-6000, USA. If you need to call about the GRE, telephone the Educational Testing Service at (609) 771-7670.

The Test of English as a Foreign Language (TOEFL) and the International English Language Testing System (IELTS) are offered several times each year at sites in the United States and abroad. Students whose native language or language of college instruction is English, must submit TOEFL or IELTS scores as part of their application to demonstrate a sufficient command of English to meet the requirements of their field. If not available locally, the annual schedules and other information about the TOEFL can be obtained online at <http://www.toefl.org> or from Educational Testing Service (ETS), TOEFL, Box 6151, Princeton, NJ 08541-6151, USA. If you need to call about the TOEFL, telephone the Educational Testing Service at (609) 771-7100. Information on the IELTS can be obtained online at <http://ielts.org>.

### Non-Degree Applicants

An applicant for admission to a non-degree program must complete all of the following:

1. Complete and electronically submit the online application
2. Submit a statement of intent through the online application system
3. Submit a curriculum vitae or résumé through the online application system

4. Submit unofficial transcripts from each post-secondary institution through the online application
5. Submit the application fee by credit card, check, or money order using the payment system associated with the online application system

A non-degree applicant may seek admission as a departmental non-degree student or as an unclassified student in the Graduate School. A graduate student who is dismissed from his or her program of study for academic reasons cannot be admitted as a non-degree student.

A departmental non-degree student is one who has been admitted to a program but does not seek an advanced degree from the University. An applicant with degree intent who lacks one or more admission requirements may be admitted temporarily to this non-degree status at the discretion of the program and with the approval of the associate dean of recruitment and admissions. The student may register for one to 15 credit hours in any graduate courses for which he or she meets the course prerequisites. However, no student initially admitted to non-degree status will be admitted to degree status until all admission requirements have been satisfied. No more than 12 credit hours earned by a student while in non-degree status may be counted toward a degree program. Admission as a departmental non-degree student does not guarantee later admission as a degree-seeking student.

An unclassified student is one who is admitted to the Graduate School in a non-degree status, but who is not a member of a particular department or program. Such a student may, with the approval of the Graduate School, take courses in any graduate program, subject to approval by the program.

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This category is usually open to non-degree-seeking students who wish to take courses in more than one program or students who have completed their degree programs but wish to continue at the University with graduate student status. No more than 12 credit hours earned by a student while in non-degree status may be counted toward a degree program. Admission as an unclassified non-degree student does not guarantee later admission as a degree-seeking student.

#### **Visiting Students, Research Visitors, and Auditors**

A visiting student is normally a degree-seeking student at another university who enrolls for credit in select courses at Notre Dame. Unless otherwise arranged by the home university and Notre Dame, the visiting student is considered a non-degree student at Notre Dame and follows the same application and enrollment procedures as a non-degree student.

A research visitor is normally a degree-seeking student in another university who comes to Notre Dame to conduct research with a faculty member, but does not register or enroll in any courses at Notre Dame. The researcher is not a student at Notre Dame, and is therefore not required to apply to the Graduate School for admission. The appointment process is completed at the request of the program in which the supervising faculty member is appointed. Research visitors are not eligible for benefits.

An auditor is a non-degree student who meets the course prerequisites but receives no academic credit. With the permission of the instructor and the program chair, a degree-seeking student may also audit courses. Audited courses may be recorded on a student's permanent record only if the student submits the proper request form and if he or she attends the course through-

out the entire semester. A recorded audit is graded V. Incomplete audits are not recorded. The audit grade of V cannot be changed to a grade with credit after the sixth class day.

In the academic year, full-time graduate students may audit courses without charge. Part-time graduate students who audit courses will be charged the normal audit fee of one-half the current credit hour fee.

In the summer session, there is no free audited course. Any course taken or audited in the summer session will be charged the full price.

#### **Acceptance**

Official acceptance to programs in the Graduate School is granted only by the Graduate School. Applicants will be informed officially of the decision on their application by the Graduate School, through the online application system.

Applicants who intend to accept offers of admission are required to confirm their acceptance by completing the acceptance/declination of offer form through the online application system.

#### **Council of Graduate Schools Policy on Accepted Offers of Admission**

In accordance with a resolution passed by the Council of Graduate Schools in the United States, the following policy is in effect:

*By accepting an offer of financial aid (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year, the enrolled or prospective graduate student completes an agreement that both the student and graduate school expect to honor. When a student accepts an offer before April 15 and subsequently desires to withdraw, the student may submit a written resignation for the appointment at any time through*

*April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer made by an institution after April 15 is conditional on presentation by the student of a written release from any previously accepted offer. It is further agreed by the institutions and organizations subscribing to this resolution that a copy of the resolution should accompany every scholarship, fellowship, traineeship, and assistantship offer.*

## **Registration**

### **Enrollment in the University**

All degree and non-degree graduate students must both register and complete the ND Roll Call process each semester during the dates and times announced by the University Registrar. Any degree-seeking admitted student who fails to register and complete the ND Roll Call process for one semester or more must seek re-instatement from the department and then from the Graduate School upon return.

### **Assignment of Credit in the Graduate School**

The Graduate School adheres to the same principles set forth in the Undergraduate Academic Code governing the award of credit for coursework.

A student may receive credit only for classes for which the student is duly registered.

Credits for all courses are reported in "semester hours." A semester hour of credit represents approximately 750 minutes of classroom instruction, which is equal to one 50-minute class period per week or its equivalent throughout a fifteen-week semester (1 x 50 x 15 = 750), plus a minimum of



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two hours of out of class student work per week or its equivalent throughout a fifteen-week semester. A semester hour of credit for laboratory, drafting, or studio work represents approximately double the time required for a semester hour of credit for classroom instruction.

### Full-Time and Part-Time Status

A full-time student is one who registers for at least nine credit hours per semester. All degree-seeking students are expected to maintain full-time status and to devote full time to graduate study. No degree student may be employed, on or off campus, without the express permission of his or her program and the Graduate School.

A non-degree student must register for at least nine credit hours per semester, or six in the summer session, to claim full-time status.

A student who registers for less than nine credit hours per semester will be considered part-time.

During the academic year, students who are enrolled in summer-concentrated degree programs with year-round training (programs in which a predominance of credit hours are taken during the summer term) are considered full-time if they register for a program-required course in the fall or spring semester.

### Residency and Non-Residency Status

Residency status is determined by a student's continual presence or non-presence on campus. If a student is on campus a majority of the days of a week or a majority of weeks per month, he or she will be considered in residence. If a student is not present on campus in this fashion, he or she will be considered a non-resident student. With the exception of library

privileges, a student classified as a non-resident cannot use University services, such as meal plans, student housing, and athletic facilities. Resident status is initiated by the student when registering and verified by their program of study.

### Continuous Registration

To maintain their student status, all students must satisfy the continuous registration requirement by both registering for a graduate-level course relevant to the student's program and completing the ND Roll Call process. A student who is pursuing degrees in the Graduate School and in another school in the University concurrently meets the continuous enrollment requirement by registering in either program. Any exception to this rule, including a leave of absence, must be approved by the Graduate School.

Degree students who have completed the coursework requirement for their degree must register for at least nine credit hours per semester, including the final semester in which they receive their degree. These credit hours should consist of either resident or non-resident thesis or dissertation research within their department. Students registered for nine credit hours may be considered full-time students whether or not they are in residence. Students not in residence and taking nine credit hours pursuant to continuous enrollment requirements are charged a special reduced registration fee.

### Summer Registration Requirements

Continuing students, i.e., degree-seeking students who are eligible to continue their studies in the fall semester, who are not receiving an academic stipend during the summer months may have access to University facilities and services from May through August

without registering for academic credit or completing the ND Roll Call process in the summer session. Students who are enrolled full-time during the academic year are considered full-time in the summer.

Incoming students who are full-time admits, but choose to start in the summer term, are considered full-time students in the summer with any registration, including zero credits. Graduate students receiving a summer stipend and conducting independent research must register for their program's zero-credit "Independent Summer Research" section. Registering for this course will ensure proper classification for tax purposes. Only those students both actively engaged in research and receiving a stipend are eligible for this course. The sections of this course will be coded to run through the entire summer term in order to align with each of the summer pay periods.

### Semester of Graduation

Degree students must register and complete the ND Roll Call process during the semester in which they plan to graduate. Students graduating in the fall or spring semester must register for nine credits; students graduating in the summer session may register for zero credits.

### Maximal Registration

During each semester of the academic year, a graduate student should not register for more than 15 credit hours of graduate courses, i.e., 60000 through 90000-level courses.

In the summer session, a graduate student should not register for more than 10 credit hours.

Audited courses do not count toward the maximal credit hour limit.

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## Courses

### Course Numbers

Courses numbered 60000 and above are typically taken by graduate students. Qualified advanced undergraduates may be admitted to these classes with the permission of the instructor and the approval of the chair.

Courses numbered 70000 and above are advanced graduate courses open only to students who have completed the prerequisites.

It is the expectation of the Graduate School that all full-time graduate students enroll in graduate-level coursework. Therefore, full-time students are expected to register for at least 3 hours of credit at the 60000 level or higher every semester that they are enrolled, except with the permission of the associate dean for academic affairs in the Graduate School.

The advanced undergraduate courses numbered 40000 – 59999 may be taken to satisfy up to six hours of graduate credit requirements. Grades in these courses will count towards the student's GPA. Programs may place additional constraints on the use of 40000 – 59999 level courses to meet their degree requirements.

For purposes of progress within a graduate department or program of study or admission to degree candidacy, no graduate credit is allowed for courses below the 40000 level.

### Add/Drop Policy

A student may add courses through the first six class days of the semester. A student may add courses after this time only on the recommendation of the program and with the approval of the Graduate School.

A student may drop courses at his or her discretion through the first six class

days of the fall or spring semester. To drop a course after this period and up to the last day for course discontinuance (see the Graduate School calendar for the exact date), requires the approval of the chair or the director of graduate studies of the program offering the course, the student's advisor, and the Graduate School.

A course may be dropped after the last day for course discontinuance only in cases of serious physical or mental illness incurred by the student or an immediate family member of that student. Courses dropped after this period will be posted on the student's permanent record with the grade of W.

If the student is registered for 12 or more credits, a course taken for credit can be changed to an audited course until the end of the sixth class day. An audit request form must be submitted to make this change. Only in cases of serious physical or mental illness can a course be changed from credit to audit after the deadline, and only until the end of the term. No changes can be made once a semester has been completed.

### Grades

Listed below are graduate grades and the corresponding number of quality points per credit hour. It is the expectation of the Graduate School that all courses taken at the graduate level will be graded by the level of the course, not by the status of the enrolled student.

Grade	Quality Points/Other
A	4.000
A-	3.667
B+	3.333
B	3.000
B-	2.667
C+	2.333

Grade	Quality Points/Other
C	2.000
C-	1.667
D	1.000
F	0.000
I	0.000 (until Incomplete is removed)
NR	Not reported
S	Satisfactory
U	Unsatisfactory
V	Auditor
W	Discontinued with permission

Grades of C- and D are awarded in the Graduate School and are used to calculate both semester and cumulative GPA; however, they will not be accepted for completion of graduate degree requirements, specific required coursework, and/or total credit hours for completion of coursework. If a student receives lower than a grade of C in a required course, he or she must either retake the same course or its equivalent as determined by the program to fulfill the degree requirement.

Under exceptional circumstances, a student receives the temporary grade of I when he or she has not completed the requirements for a 60000 or higher-level graduate course within the semester or summer session. No grade of I can be given for courses below the 60000 level or to graduating students in the final semester or final summer session of a terminal degree program.

The grades of S and U (Satisfactory and Unsatisfactory) are used in courses without semester credit hours, as well as in research courses, departmental seminars, colloquia, workshops, directed studies, field education, and skills courses. These courses, if given the grade of S, do figure in a student's earned semester credit-hour total but do not figure in the computation of

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the GPA No credit is given for a grade of U.

The grade of V (Auditor) does not have quality-points attached to it. It is the only grade available to the registered auditor. The audit must be requested before the sixth class day of the semester. The audited class is made part of the student's permanent record, and the auditor should attend the course throughout the entire semester. The grade of V cannot be changed to a credit-earning grade. Normally, graduate students are limited to auditing a maximum of two courses per semester.

The grade of W (discontinued with permission) is given for a course that a student is allowed to drop after the mid semester point. Approval of the grade of W is required by the associate dean for academic affairs in the Graduate School.

### Incomplete Coursework

Students should complete the work of graduate courses at the 60000-90000 level during the regular academic term in which they are taken. This expectation of students should also guide faculty members who teach graduate courses. That is, faculty are obligated to evaluate and grade graduate work by the end of the term in which the course is offered.

A grade of "Incomplete" (I) should be given only in exceptional circumstances when there are compelling reasons. When a student receives a grade of I, he or she has 30 calendar days from when grades were due (for the semester in which the I was given) to complete the coursework for a grade. The instructor of record then has 14 calendar days to report the grade. If the coursework is not completed by this date, the grade of I will be changed permanently to a grade of F. Extensions for Incompletes require formal approval from the associate dean for academic

affairs in the Graduate School. The associate dean reserves the right to seek appropriate documentation from the Sara Bea Accessibility Services Office if a request for an extension beyond the usual 30 calendar days is made for mental or physical health reasons.

### Grade Point Average

Quality point values are used to compute the student's GPA. The GPA is the ratio of accumulated earned quality points to the accumulated attempted graded semester credit hours. Only courses taken at Notre Dame are calculated for a student's GPA.

Continuation in a graduate degree program, admission to degree candidacy, and graduation require maintenance of at least a 3.0 (B) cumulative grade point average (GPA).

An adequate GPA is only one factor taken into consideration in determining a student's qualifications for an advanced degree. Degree students should be aware of their program's performance criteria. The program and the Graduate School annually evaluate each graduate student's overall performance on the basis of these criteria.

### Transfer Credits

A program may accept coursework completed at another accredited university toward meeting its degree requirements. A student may transfer credits earned at another accredited university only if: (1) the student has degree-seeking status at Notre Dame; (2) the courses taken are graduate courses appropriate to the Notre Dame graduate program, and the student had graduate student status when he or she took these courses; (3) the courses were completed within a five-year period prior to admission to a graduate degree program at Notre Dame, or while enrolled in a graduate degree program at Notre Dame; (4) grades of B (3.0 on

4.0 scale) or better were achieved; and (5) the transfer is recommended by the program and approved by the Graduate School.

These five requirements also apply to the transfer of credits earned in another graduate program at Notre Dame.

A student transferring from an unfinished master's program may not transfer more than six semester credit hours into either a Notre Dame master's or doctoral program.

If the student has completed a master's or doctoral program, he or she may transfer up to nine semester credit hours to a Notre Dame master's program and up to 24 semester-credit hours to a Notre Dame doctoral program. Grades for transferred courses are not included in the student's Notre Dame GPA.

With advanced approval from the graduate program of study, a Notre Dame undergraduate who is registered for graduate courses at Notre Dame may use this coursework to meet graduate program requirements. These credits cannot be used to satisfy both undergraduate and graduate degree requirements. However, students in an integrated bachelor's/master's degree program may count up to six credits toward both degrees.

## Graduate Student Status

### Access to Computing Services

The University of Notre Dame NetID accounts and related services are intended for faculty, staff, and currently registered students. A student who fails to register and complete the ND Roll Call process by the date announced by the Registrar will forfeit the right to access his or her NetID account and related services. University comput-



ing resources supplied by way of the NetID are normally available to a student for up to 60 days after his or her graduation date. A student granted a leave-of-absence would normally retain access to University computing services for up to two semesters. A student who is separated from the University due to an academic suspension, academic dismissal, or withdrawal will no longer have access to University computing services, unless an extension has been approved by the dean of his or her college. A student attending Notre Dame for the summer only, with a non-degree seeking status, will normally retain access to University computing service for up to 60 days after the August graduation date. A student who is separated from the University for other reasons will no longer have access to University computing services.

### **Leave of Absence**

For exceptional reasons and on the recommendation of the program, a student in good academic standing may request a leave of absence for a maximum of two consecutive semesters. A request for a leave of absence must be made before the first class day of the semester in which the leave is taken, and the associate dean for academic affairs in the Graduate School must approve all leaves of absence. If, for some urgent reason, a student is allowed to leave the University after the beginning of the semester, the withdrawal procedure must be followed. If the student does not return at the end of the leave of absence period, he or she is no longer considered a student at Notre Dame and must go through the readmission process if he or she wishes to complete the program at a later date.

In the case of a medical leave of absence, clearance from the University Health Center or University Counsel-

ing Center is required prior to readmission.

### **Medical Separation from Academic Duties**

Students enrolled in the Notre Dame Graduate School who wish to temporarily interrupt their programs for medical reasons must make an official request to the Graduate School. Students are eligible under this policy if they have a “serious medical condition.” For purposes of this policy, “serious medical condition” means a medical condition that (1) requires multiple-day hospitalization OR (2) renders the student unable to engage in coursework and all other Graduate School-related duties for a period of at least ten (10) calendar days. Written certification by a physician that the student has a serious medical condition as defined in this policy must be submitted to the Graduate School as soon as the need is foreseen (for emergency requests). In situations involving childbirth or adoption, see the Childbirth and Adoption Accommodation Policy. In all cases, regardless of the nature of the medical condition, the duration of the separation will be as certified by the physician up to a maximum of six weeks. Students may utilize this medical separation policy two non-consecutive times during their graduate studies. Should students need more than six weeks at any one time, they must withdraw from the University. Leaves of absence for one semester or more for medical or other reasons are governed by the Graduate School.

### **Childbirth and Adoption Accommodation Policy**

The childbirth and adoption accommodation policy is intended to assist graduate students who are new parents. Unlike the medical separation policy that covers any medical

condition, this accommodation policy addresses a single set of circumstances: new parenthood. It is not a leave of absence; it is an accommodation. Students maintain their standing as students, are provided relief from full-time responsibilities and academic deadlines for up to one semester, and are eligible for financial support.

Programs are encouraged to work out specific arrangements with students, on a case-by-case basis, within the broad framework of this policy.

For the full text of this policy, see the “Childbirth and Adoption Accommodation Policy” on page 103.

### **Withdrawal from the Program**

To withdraw from the University before the end of the semester, a student must inform the program and the Graduate School, and complete the Registrar’s Separation from the University Form.

Upon approval of the withdrawal, grades of W are given when a student withdraws after the mid-semester course discontinuance deadline has passed. If a student withdraws before this deadline, the courses in which the student was registered will not be recorded. If a student drops out of the University without following the procedure described above, a grade of F is recorded for each course.

To re-enter a program, the student must follow the readmission process. Credits for any courses or examinations will be forfeited if the student interrupts his or her program of study for five years or more.

In the case of a health withdrawal, the Graduate School may require a recommendation from the University Health Center or University Counseling Center regarding the student’s readiness to resume academic work prior to readmission.

The University reserves the right to require the withdrawal of any student when academic performance, health status, or general conduct may be judged clearly detrimental to the best interests of either the student or the University community.

### Assessment of Student Progress

All students should receive written feedback annually. This may come from the advisor, the area coordinator (or faculty member responsible for the area in which the student is working), or the director of graduate studies.

If an advisor has serious concerns about a student's academic performance or progress to degree, he or she should communicate this to the student in written form. This should be copied or forwarded to the director of graduate studies. If the advisor's recommendation calls into question the student's suitability for the program, the director of graduate studies will issue a warning letter to the student that specifies the concerns and the steps necessary to correct the situation, as well as the consequences of continued substandard academic performance. If the student's advisor happens to be the director of graduate studies, this letter will be initiated by the chair of the department. The warning letter should specify a specific date when the student's progress will be re-evaluated. A copy of the warning letter should be sent to the associate dean for academic affairs in the Graduate School.

If the student does not meet the stipulations outlined in the warning letter within the timeframe specified, the student will be either put on probation or dismissed from his or her program of study.

### Graduate Student Status Designations

There are two status designations available to graduate students: in good standing and on probation. A graduate student can only have one designation, per program, at any given time.

#### *In Good Standing*

Graduate students who are enrolled and making satisfactory progress in their program of study are considered in good standing. Students must be in good standing to receive a graduate degree.

#### *On Probation*

A student who does not meet the stipulations within the timeframe outlined in the warning letter may be placed on probation. On probation status is intended to offer a student a final opportunity to correct deficiencies in his or her academic progress. Normally, a student will be on probation one or, at most, two semesters.

A student on probation must complete the stipulations outlined in the probation letter within the timeframe outlined or will be dismissed from his or her program of study.

Students on probation are ineligible for financial support from the Graduate School (stipend, full tuition, health subsidy, and professional development funds) except for a tuition scholarship that covers eight of the nine credit hours required to maintain full-time status. While on probation, if a student does meet the stipulations within the timeframe outlined in the probation letter, as decided by the program, the student will return to in good standing status the next semester of enrollment.

### *Probation Initiated by the Graduate School*

In addition to the probation letter initiated by the student's program of study, there are three ways in which a student may be placed on probation by the Graduate School. These are:

1. A cumulative grade point average below 3.0 in any two semesters;
2. A failure to pass candidacy exams by the end of the eighth semester;
3. Earning a U in research for two consecutive semesters.

Students who are placed on probation by the Graduate School will receive an official letter from the associate dean for academic affairs in the Graduate School that informs them of their status change.

### Dismissal of a Student

Failure of a student to meet the stipulations within the timeframe outlined in either the warning letter or the probation letter may lead to dismissal from the program.

A student can be immediately dismissed from his or her program of study for the following reasons without a warning letter or a period of probationary status.

#### *Extreme Under-Performance*

This dismissal will be applied to a student whose performance is deemed wholly unacceptable by the student's advisor, director of graduate studies, or program faculty. A semester GPA below 2.5 in any single semester, or below 3.0 for two consecutive semesters; three consecutive U grades in research are examples of extreme underperformance.

***Inability to Secure a Laboratory/Advisor***

In some cases, a student may not be able to secure a laboratory and/or advisor. Normally, the student will be given funding for the remainder of the semester in which the student has registered. If the student and the director of graduate studies are unable to find an advisor, the student may be dismissed from the program.

***Threat to Health and/or Safety***

In rare circumstances, continued enrollment of a graduate student may constitute a serious disruption of the residential community or the academic environment. A student may be dismissed if: (a) The student poses a direct threat to the health or safety of himself or herself or others, or has seriously disrupted others in the student's residential community or academic environment; or (b) the student's behavior or threatening state is determined to be the result of a medical condition, or the student refuses to cooperate with efforts deemed necessary by the University Health Services and/or the University Counseling Center to evaluate the cause of the student's behavior or threatening state. In some circumstances, the level of care and accommodation recommended may exceed the resources or appropriate staffing capabilities of the University or may be beyond the standard of care that University Health Services can be expected to provide or monitor.

The Graduate School is responsible for monitoring and assessing the academic progress of its students. However, there are other reasons for which a student can be disciplined, up to immediate dismissal from his or her program of study. For more details on these policies, please consult *du Lac: A Guide to Student Life* at <http://dulac.nd.edu>.

Students will be notified in writing, by the director of graduate studies,

of the decision to dismiss them from their program of study for academic reasons. This notification will also be sent to the associate dean for academic affairs. The student may appeal the decision per the grievance and appeal procedures.

**Academic Integrity**

Integrity in scholarship and research is an essential characteristic of the academic life and social structure of the University. Any activity that compromises the pursuit of truth and the advancement of knowledge besmirches the intellectual effort and may undermine confidence in the academic enterprise. A commitment to honesty is expected in all academic endeavors, and this should be continuously emphasized to students, research assistants, associates, and colleagues by mentors and academic leaders.

Violation of integrity in research/scholarship includes, but is not limited to: plagiarism; deliberate fabrication or falsification in proposing, performing, or reporting research; or other deliberate misrepresentation in proposing, conducting, reporting, or reviewing research. Misconduct in research/scholarship does not include errors of judgment; errors in recording, selection, or analysis of data; differences in opinions involving interpretation; or conduct unrelated to the research process. Misconduct includes practices that materially and adversely affect the integrity of scholarship and research.

Plagiarism is a form of misconduct. A person's words and ideas are his or her own; they belong to the individual and should be considered the individual's property. Those who appropriate the words and/or ideas of another, and who attempt to present them as their own without proper acknowledgement of the source, whether intentional or not, are committing plagiarism or intellectual theft. It is assumed

that all work submitted by a student represents the student's own ideas and work. Verbatim copying, paraphrasing, adapting or summarizing the work of another, regardless of the source – whether books, journals, periodicals, websites, or other forms of media – must be properly cited. Any representation of the work of another that is not properly referenced is considered to be plagiarism. Ignorance of what constitutes plagiarism is not a defense to an allegation of a violation of the academic integrity policy. It is the responsibility of students to familiarize themselves with this definition of plagiarism and to learn proper citation techniques.

Any person who has reason to believe that a violation of this policy has occurred shall discuss it on a confidential basis with the department chair or director of the appropriate institute. If a perceived conflict of interest exists between the chair/director and the accused, the next highest academic officer shall be notified of the charge. The chair/director shall evaluate the allegation promptly. If it is determined that there is no substantial basis for the charge, then the matter may be dismissed with the fact of dismissal being made known to the complainant and to the accused if he or she is aware of the accusation. A written summary of charges, findings, and actions shall be forwarded to the dean of the Graduate School as a matter of documentation. Otherwise, the chair will select an impartial panel consisting of three members, one of whom may be a graduate student, to investigate the matter. The chair will inform the accused of the charges. The panel will determine initially whether to proceed directly to a hearing to further investigate the case, or to dismiss the charges. If the panel decides to proceed directly to a hearing, the hearing will be held within 10 business days (during normal University operations) of the origi-

nal notification. If the panel decides that further investigation is necessary, it shall immediately notify the chair. If it decides that a hearing is not warranted, all information gathered for this investigation will be destroyed. The utmost care will be taken to minimize any negative consequence to the accused.

The accused party must be given the opportunity to respond to any and all allegations and supporting evidence at the hearing. The response will be made to the appointed panel. The panel will make a final judgment, recommend appropriate disciplinary action, and report to the chair in writing. The report will include all of the pertinent documentation and will be presented within 30 business days (during normal University operations) after meeting with the accused. Copies of the report are to be made available to the accused, the chair, and the dean of the Graduate School. If a violation is judged to have occurred, this might be grounds for dismissal from the University; research/scholarship violations might be reported to the sponsor of the research effort (e.g., NSF, NIH, Lilly Foundation, etc.), if appropriate.

If the student chooses to appeal, he or she must address the appeal in writing to the dean of the Graduate School within 10 days. The student has the right to appear before the dean or his or her delegate. The dean may decide to appoint an ad hoc committee to handle the appeal, if deemed necessary.

Violations of academic integrity by individuals who are not students are governed by different rules; students who are working on externally sponsored programs may also be covered by sponsor-mandated rules. Contact the Office of Research's director of research compliance for further information.

The penalty for a student who admits wrongdoing should be determined by

the graduate committee of the student's department or program. Any student who is found in violation of integrity in research and/or scholarship can be dismissed from the University.

### **Falsification of Academic Credentials**

A student who has been admitted to a graduate degree program based in part upon a previously earned academic degree and is found to have intentionally misrepresented this information will be immediately dismissed from his or her program of study and will be barred from future graduate work at the University.

A current student or a student who has recently left the University without completing a degree who then claims to have earned said degree will be immediately dismissed from the program of study (if applicable) and barred from future graduate work at the University.

### **Grievance and Appeal Procedures**

Students follow the grievance and appeal procedures of the program in which they are studying. Appeals beyond the program are made directly to the dean of the Graduate School.

For full details regarding the program resolution process and the formal appeal procedure, see "Appeal Procedure for Graduate Students" on page 102.

## **Degree Requirements**

### **The Master's Degree**

The goal of the University master's programs is to address all aspects of a student's development as he or she transitions from a student to a professional. To this end, the Graduate School expects that the student will

become knowledgeable of the broad scope of the discipline. The student should also have the capacity to think through ethical issues raised by their coursework and/or research, and to weigh important implications within value systems. Finally, students should be professionally prepared so that when they assume their careers, they can do so with confidence. These goals should be reflected in the requirements for the degree.

In addition to the following Graduate School requirements, individual programs may have higher standards. Students are expected to know their program requirements.

#### ***Credit Hours***

At least thirty (30) credit hours are required for the master's degree. Some programs may require more. These credit hours are earned through a combination of coursework and/or research.

#### ***Residency***

The minimum residency requirement for the master's degree is registration at full-time status for one semester during the academic year, or for one summer session.

#### ***Foreign Language Requirement***

The Graduate School does not require foreign language reading proficiency for the master's degree. However, some programs do have this requirement. Students should consult their programs concerning this requirement.

#### ***Time Limits***

All requirements for the master's degree must be completed within five years.

A master's program that is pursued during the summer and the academic



## ACADEMIC REGULATIONS

year must also be completed within five years.

A student attending summer sessions only must complete all requirements within seven years.

### ***Thesis Directors***

Each student is assigned an advisor from the time of enrollment. This may initially be the director of graduate studies, but an individual advisor or thesis director will be chosen as soon as practicable, following the program's policies.

Advisors and thesis directors are chosen from the tenured and tenure-track faculty of the student's program or from the faculty in their program who hold a concurrent tenured or tenure-track position at Indiana University School of Medicine – South Bend. There also may be one co-director chosen from the faculty outside (or within) the student's program. A co-director can be chosen from non-tenured and non-tenure-track faculty (e.g., special professional faculty, research professional faculty) if the other co-director is tenured or tenure-track faculty. In exceptional cases, a student may choose a thesis director from the Notre Dame tenured and tenure-track faculty outside the program or department. Arrangements for extra-departmental directors or co-directors must be consistent with program policies and must be approved by the program.

### ***Comprehensive Examination***

By the end of the term following completion of the coursework required by the program, the degree candidate must have taken an oral and/or written master's examination demonstrating mastery in his or her field. Failure in either one or both parts of the examination results in automatic forfeiture of degree eligibility, unless the program recommends a retake. If a retake is

recommended, it must be completed by the end of the following semester. The Graduate School allows only one retake of the master's examination.

Some programs have an equivalent requirement in lieu of the master's examination. Students are advised to be cognizant of their respective program requirements with regard to the master's examination or its substitute.

### ***Admission to Candidacy***

To qualify for admission to candidacy, a student must be in a master's degree program. He or she must be registered and enrolled in the program and must maintain a minimum cumulative GPA of 3.0 in approved coursework. A student who seeks admission to candidacy in a research master's program must also demonstrate research capability and receive program approval of his or her thesis.

Admission to candidacy is a prerequisite to receiving any graduate degree. It is the student's responsibility to initiate their admission to candidacy with their program. The applicable deadline is published in the Graduate School calendar.

### ***Thesis Requirement***

The thesis is the distinctive requirement of the research master's degree. With the approval of his or her advisor, the student proposes a thesis topic for program approval. The approved topic is researched and the results presented under the supervision of a thesis director.

Once the thesis director has approved the thesis for distribution to the readers, the candidate must deliver print or PDF copies, depending on the preferences of the program, to the two official readers appointed by the program. Readers are appointed from among the regular teaching and research faculty of

the student's program or department. The thesis director may not be one of the official readers. The appointment of a reader from outside the student's program or department must have the program's approval. Each reader must unconditionally approve the thesis and the program should promptly report the results to the Graduate School.

When the thesis is given to the readers, the candidate should also give a complete copy in PDF to the Graduate School, where it will be reviewed for compliance with the formatting requirements. The formatting editor will review the layout of the document and advise the student of any required changes.

The format of the thesis should follow the guidelines established by the Graduate School; these guidelines can be found online at <http://graduate-school.nd.edu>. The Graduate School reserves the right to reject theses not properly formatted.

### ***Submitting the Thesis***

To receive the degree at the next graduation, the master's candidate who is completing a thesis must submit it to the Graduate School on or before the deadline published in the Graduate School calendar. Candidates should be cognizant of deadlines for graduation established by the Graduate School and the program.

The traditional formal thesis must be submitted in electronic form as a PDF uploaded to the CurateND dissertation and thesis intake site at <https://deposit.library.nd.edu/areas/etd/start>. Only the official submission will be accepted by the Graduate School and cataloged by the Hesburgh Library.

In addition to the formal PDF copy of the thesis and the thesis director's or co-directors' approval to submit, additional submission materials may be

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required. For the most current list of requirements, students should consult the submission checklist on the Graduate School website.

Candidates must check with their programs for any departmental additions to the Graduate School requirements.

### ***Submission of a Non-Traditional Theses***

A student who wishes to complete a non-traditional formal thesis (for example, a multimedia project instead of a more traditional written thesis PDF) should discuss the alternate format with his or her thesis director prior to submitting the thesis proposal. Upon approval at the program level, the thesis director should notify the Graduate School's dissertation and thesis editor by email, and indicate his or her approval of the non-traditional approach.

Once the Graduate School has been alerted to an incoming non-traditional thesis, the student should then arrange to discuss the submission with the dissertation and thesis editor as early as possible in the semester in which he or she intends to graduate.

At a minimum, a non-traditional thesis submission must include:

- The director's approval, either as a digital sign-off on the CurateND intake site, or as a set of printed title pages with the director's original signature; and
- An abstract (in English) that provides a description or analysis of the work.

The title page and abstract are both subject to a formatting review, and must meet the standards required of a traditional thesis.

The title page and abstract should then be submitted through the ETD site. In addition, the degree candidate

should upload any relevant digital components of the thesis that he or she wishes to have preserved by the library.

All other master's thesis submission requirements for the traditional written thesis, including deadlines, surveys, and other checklist items, must be observed.

### **The Doctor of Philosophy Degree**

The goal of the University in its doctoral programs is to address all aspects of a student's development as he or she transitions from a student to a professional. To this end, the Graduate School expects that the student will become an expert in a specific area within her or his discipline. In addition, the student should also become fully competent in the broad scope of the discipline, and be able to engage with others in professional society meetings at a sophisticated level. The student should have the capacity to think through ethical issues raised by his or her research and to weigh important implications within value systems. Finally, students should be professionally prepared so that when they assume their careers, they can do so with confidence. These goals should be reflected in the requirements for the degree.

In addition to the following Graduate School requirements, individual programs may require higher standards. Students are expected to know their program's requirements.

### ***Credit Hours***

At least sixty (60) credit hours, or a minimum of 36 credit hours beyond a previously awarded master's degree, are required for the Ph.D. Some programs may require more. These credit hours are earned through a combination of coursework and/or research.

### ***Residency***

The minimum residency requirement for the Ph.D. degree is normally full-time status for four consecutive semesters

### ***Foreign Language Requirement***

The Graduate School does not have a foreign language requirement, but some programs do. Students should consult their program concerning this requirement.

### ***Responsible Conduct of Research and Ethics Training***

The Graduate School requires all Ph.D. students to complete any and all training modules for the Responsible Conduct of Research and Ethics requirements. All students supported by federal grants must be certified in accordance with national guidelines and the policies of the Office of Research. For more information, please consult the Professional Development portion of the Graduate School website at <http://graduateschool.nd.edu>.

### ***Award of Master's Degree to Doctoral Students***

A doctoral student may receive the master's degree without taking the master's comprehensive examination on the recommendation of the program and completion of: (a) the coursework required by the program for the master's degree, and (b) all written and oral parts of the doctoral candidacy or Ph.D. qualifying examination. Programs may have additional criteria, or may choose not to offer a master's degree in this manner; students should consult the program's guidelines.

### ***Time Limit***

The student must fulfill all doctoral requirements, including the dissertation, its defense, and the official submis-



sion within eight years from the time of matriculation, unless interrupted by approved leave(s) and/or approved childbirth accommodation(s). Failure to complete any of the Graduate School or program requirements within the prescribed period results in forfeiture of degree eligibility.

If, after the eighth year of study, a student has not fulfilled all doctoral requirements, he or she may apply for a one-year dissertation completion status. Students who are granted this status are considered part-time and must register each semester for the equivalent of one credit hour of resident tuition, payable by the student.

#### ***Advisors and Dissertation Directors***

Each student is assigned an advisor from the time of enrollment. This may initially be the director of graduate studies, but an individual advisor or dissertation director will be chosen as soon as practicable, following the program's policies.

Advisors and dissertation directors are chosen from the tenured and tenure-track faculty of the student's program or from the faculty in their program who hold a concurrent tenured or tenure-track position at Indiana University School of Medicine – South Bend. There also may be one co-director chosen from the faculty outside (or within) the student's program. A co-director can be chosen from non-tenured and non-tenure-track faculty (e.g., special professional faculty, research professional faculty) if the other co-director is tenured or tenure-track faculty. In exceptional cases, a student may choose a dissertation director from the Notre Dame tenured and tenure-track faculty outside the program or department. Arrangements for extra-departmental directors or co-directors must be consistent with program policies and must be approved by the program.

#### ***Candidacy Examination***

The examination consists of two parts: a written component and an oral component. The written part of the examination normally precedes the oral part. It is designed, scheduled, and administered by the program. The oral part of the examination is normally taken after the completion of the coursework requirement. If the proposal defense is part of the oral, it should be a defense of a proposal and not of a completed dissertation.

Normally, the candidacy examination is passed, and the dissertation topic approved, by no later than the student's eighth semester of enrollment. A student who fails to meet this deadline will be placed on probation and Graduate School funding will be discontinued.

A board of at least three voting members nominated by the department administers the oral part of the examination. (The department may require larger committees.) Normally, this board has the same membership as the student's dissertation committee. Board members are normally chosen from the teaching and research faculty of the student's department, although if approved by the department, a faculty member from another department or another institution may also be appointed to the committee.

Prior to the examination, committees should review departmental regulations for the conduct of the exam, the process of the exam, and voting procedures. Before the exam begins they should inform the candidate of the process of the exam. After completion of the examination, the candidate should be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting on whether that performance merits a passing or failing of the exam. On a

board of three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the advisor.

In case of failure in either or both parts of the doctoral candidacy examination, the department chair, on the recommendation of a majority of the examiners, may authorize a retake of the examination if this is permitted by departmental regulations. An authorization for retake must be approved by the Graduate School. A second failure results in forfeiture of degree eligibility and is recorded on the student's permanent record.

A candidate has the right to appeal the result of the exam to the dean of the Graduate School on procedural grounds only, not on its substance or on his/her performance. If a retake is granted, an outside monitor appointed by the Graduate School must be present.

#### ***Admission to Candidacy***

Admission to candidacy is a prerequisite to receiving a doctoral degree. To qualify for admission to doctoral candidacy, a student must: be in a doctoral program, complete the program coursework requirement with a cumulative GPA of 3.0 or better, complete any program language requirements, pass the written and oral parts of the doctoral candidacy examination, and have the dissertation proposal approved (if this is not part of the candidacy exam).

Admission to candidacy is a prerequisite to receiving any graduate degree. It is the student's responsibility to initiate their admission to candidacy with their program. The applicable deadline

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is published in the Graduate School calendar.

### ***The Ph.D. Dissertation***

In continuing consultation with the dissertation director, the candidate explores research areas in his or her field to formulate a dissertation proposal. The methods of approval of the dissertation proposal are determined by the individual programs.

The department chair or director of graduate studies will appoint a dissertation committee consisting of the dissertation director and at least two readers. (The department may require larger committees.) Normally, the committee is drawn from the membership of the student's oral candidacy board. The student's department or program must approve the appointment of committee members from outside the department and/or the University.

The candidate delivers printed or PDF copies of the finished dissertation, depending on the preference of the program, to the department chair for distribution to the readers.

Readers normally have two to four weeks to read the dissertation, decide whether it is ready to be defended, and so indicate on the appropriate form to the Graduate School. Reader approval of the dissertation for defense does not imply reader agreement or support; it implies reader acknowledgment that the dissertation is an academically sound and defensible scholarly product. Only a dissertation that has been unanimously approved for defense by the three readers may be defended.

Even though the dissertation has been approved for defense, revisions may be required. If defects in the dissertation come to light at the defense, the candidate may be asked to revise the dissertation before it is accepted by

the Graduate School and the degree is conferred. In that case, it will be the responsibility of the dissertation director, or such person as the committee may appoint, to report to the Graduate School that such revisions have been completed satisfactorily.

When the dissertation is given to the readers, the candidate should also give a complete copy in PDF to the Graduate School, where it will be reviewed for compliance with the formatting requirements. The formatting editor will review the layout of the document and advise the student of any required changes.

The format of the dissertation should follow the guidelines established by the Graduate School and ProQuest. These guidelines can be found online at <http://graduateschool.nd.edu>. The Graduate School reserves the right to reject dissertations not properly formatted.

### ***Defense of the Dissertation***

In defending the dissertation, the doctoral candidate supports its claims, procedures, and results. The defense is the traditional instrument that enables the candidate to explore with the dissertation committee the dissertation's substantive and methodological force. In this way, the candidate and the committee confirm the candidate's scholarly grasp of the chosen research area.

Prior to the examination, committees should review departmental regulations for the conduct of the defense, the process of the defense, and voting procedures. Before the defense begins, the committee should inform the candidate of the defense process. After completion of the examination, the candidate must be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting

on whether the performance merits a passing or failing of the defense. On a board of three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the advisor.

In case of failure of the defense, on the recommendation of a majority of the examiners, another opportunity to defend may be authorized if this is permitted by departmental regulations. An authorization for a second defense must be approved by the Graduate School. A second failure results in forfeiture of degree eligibility and is recorded on the candidate's permanent record.

A candidate has the right to appeal the result of the defense to the dean of the Graduate School on procedural grounds only, not on its substance or on his/her performance. If a retake is granted, an outside monitor appointed by the Graduate School must be present.

### ***Submitting the Dissertation***

To receive the degree at the next graduation, the doctoral candidate who has successfully defended his or her dissertation must submit it to the Graduate School on or before the deadline published in the Graduate School calendar. Candidates should be cognizant of deadlines for graduation established by the Graduate School and the program.

To be accepted by the Graduate School, the dissertation should be prepared according to the formatting guidelines established by the Graduate School and ProQuest. These guidelines can be found online at the Graduate School's website,

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[school.nd.edu](http://school.nd.edu). For formatting guidance beyond these guidelines, students should follow the formatting custom in their field.

After successfully defending the dissertation and making any necessary text and formatting changes, the candidate must submit the final dissertation to the Graduate School electronically by uploading a PDF of the document to the CurateND dissertation and thesis intake site at <https://deposit.library.nd.edu/areas/etd/start>. Only the official electronic submission will be accepted by the Graduate School and the Hesburgh Library.

In addition to the formal PDF of the dissertation and the dissertation director's or co-directors' approval to submit, additional submission materials may be required; for the most current requirements, students should consult the submission checklist on the Graduate School website.

Candidates must check with their programs for any departmental additions to the Graduate School requirements.

### **The Doctor of Musical Arts Degree**

The goal of the University in its DMA program is to address all aspects of a student's development as he or she transitions from a student to a professional and well-informed performing musician and pedagogue. To this end, the Graduate School expects that the student becomes an expert in a specific area within her or his discipline. In addition, the student should also become fully competent in the broad scope of the discipline, and be able to engage with others in professional society meetings at a sophisticated level and to perform within his or her expertise at the highest level. The student should have the capacity to think through ethical issues raised by his or her research and performance and to weigh important implications within value

systems. Finally, students should be professionally prepared so that when they assume their careers, they can do so with confidence. These goals should be reflected in the requirements of the degree.

In addition to the following Graduate School requirements, students applying for the DMA are required to have an appropriate master's degree, either the M.A., M.M., or the MSM. The holding of this degree is assumed in the description that follows. Note that the DMA is a stand-alone degree, separate from the appropriate master's degree earned either at Notre Dame or at another institution. If the student has an MSM from Notre Dame, that transcript is a separate document and grades from the MSM have no bearing on the grade-point average of the DMA.

#### ***Credit Hours***

At least sixty (60) credit hours are required, beyond the previously earned master's degree. All GPA credits must be completed during the first two years of residency and prior to admission to candidacy.

#### ***Residency***

The normal residency requirement for the DMA is full-time status for six consecutive semesters, with a minimum of four.

DMA students often are recruited for positions at the end of the second summer of residency. When this is the case, or in the case of taking a fellowship abroad, the DGS and the dissertation director help the student to negotiate ways of preparing for the lecture recital and taking lessons with her/his studio teacher. In some cases, the student may study with an approved professional outside of ND; in other cases, the student may arrange occasional visits to ND to meet with

her/his studio teacher. Increasingly, it is possible to have lessons using some form of online communication.

#### ***Foreign Language Requirement***

As part of admission to candidacy by the end of the summer of the second year, a student must have met the program's requirements for competency in at least one foreign language.

#### ***Ethics Training***

As part of its holistic approach to graduate education, the Graduate School requires all DMA students to complete 3-hour ethics training. For more information, please consult the Graduate Training portion of the Graduate School website at <http://graduateschool.nd.edu>.

#### ***Time Limit***

The student must fulfill all DMA requirements, including the dissertation, its defense, and the official submission within 4.5 years from the time of matriculation, unless interrupted by approved medical leave(s) and/or approved childbirth accommodation(s). Failure to complete any of the Graduate School or program requirements within the prescribed period results in forfeiture of degree eligibility.

Intense work toward completion of the dissertation is necessary for a student to remain in good standing in the DMA program, and this progress will be evaluated each semester after admission to candidacy. If, after 4.5 years of enrollment, a student has not fulfilled all doctoral requirements, he or she may apply for dissertation completion status for one semester. Students who are granted this status are considered part-time and must register for the equivalent of one credit hour of resident tuition, payable by the student.

This request for an extension must be made in the semester before the status

to be granted, that is, within the fall semester of the fifth year of enrollment. No further extensions will be granted after the end of the fifth year of enrollment. If a student has not defended their dissertation by the end of the semester of dissertation completion status, he or she will be terminated.

### **Candidacy Examination**

The examination consists of two parts: a written component and an oral component. The written part of the examination normally precedes the oral part. It is designed, scheduled, and administered by the program. The oral part of the examination is normally taken after the completion of the 47 GPA credit hour coursework requirement.

Normally, the candidacy examination is passed, and the DMA dissertation topic approved, no later than the summer following the fourth semester of enrollment.

### **Admission to Candidacy**

Admission to candidacy is a prerequisite to receiving a doctoral degree. To qualify for admission to doctoral candidacy, a student must: complete the program coursework and language requirements with a cumulative GPA of 3.0 or better, pass the written and oral parts of the doctoral candidacy examination, and have the DMA dissertation proposal approved.

It is the responsibility of the student to apply for candidacy admission by submitting the appropriate form to the Graduate School through the director of graduate studies.

### **The DMA Dissertation**

In continuing consultation with the dissertation director, the candidate explores research and performance areas in his or her field to formulate a proposal. The methods of approval of the

dissertation proposal are determined by the student's program of study.

### **Defense of the DMA Dissertation**

In defending the dissertation, the DMA candidate supports its claims, procedures, and results. The defense is the traditional instrument that enables the candidate to explore with the dissertation committee the dissertation substantive and methodological force. In this way, the candidate and the committee confirm the candidate's scholarly and performative grasp of the chosen research area.

### **Submitting the DMA Dissertation**

To receive the degree at the next graduation, the DMA candidate who has successfully defended his or her dissertation must submit it to the Graduate School on or before the deadline published in the Graduate School calendar. Candidates should be cognizant of deadlines for graduation established by the Graduate School and the program.

The format of the dissertation should follow the guidelines established by the Graduate School. These guidelines can be found online at <http://graduate-school.nd.edu>. The Graduate School reserves the right to reject dissertations not properly formatted.

## **FINANCIAL INFORMATION**

### **Tuition and Expenses**

Please note: The following tuition, fees, housing, and living costs are for the academic year 2020–2021. Annual increases in costs should be anticipated.

### **Tuition**

Full-time for a degree-seeking student is defined as nine credit hours per semester.

For the full-time graduate student, the tuition for the academic year 2020–2021 is \$57,050 plus fees. Tuition for the part-time student is \$3,169 per semester credit hour plus fees. Non-resident tuition is \$500 per semester.

In the ESTEEM, ACMS master of science, and Global Health master of science programs, the tuition is divided across the three terms, with 20% charged in the summer, 40% in the fall, and 40% in the spring.

The Data Science master of science program has a tuition rate of \$52,000, charged at \$10,400 per term, plus fees, in each of five consecutive terms.

A full-time graduate student may audit courses without charge during the academic year. Any course taken or audited in the summer session will be charged the full price.

### **Academic Year Fees**

- Technology Fee: \$250\*
- Health Center Access Fee: \$150\*\*
- Graduate Student Activity Fee: \$72\*\*\*

*\* The technology fee provides partial funding for the University's enterprise-wide technology infrastructure, which provides all students access to the Internet, e-mail, course ware, campus clusters, ResNet, and a wide array of the latest software. This fee provides for the growth in student services, such as course and degree requirements, Web Registration, and value-added Internet-related capabilities.*

*\*\* The health center access fee provides students access to all services*



## FINANCIAL INFORMATION

at the University Health Center and University Counseling Center, including 24-hour medical care and counseling/mental health assistance, and alcohol and drug education programs, as well as health education and wellness programs.

\*\*\* The graduate student activity fee is the responsibility of the student. This fee, charged in the fall to all graduate students, covers the cost of graduate student activities, including but not limited to lectures/seminars, graduate student officer research funds, and office overhead. The fee also funds a competitive award that partially reimburses expenses graduate students incur during travel to conferences and meetings to present work conducted in the students' major fields of study.

### Office of Student Accounts

Telephone: (574) 631-7113  
E-mail: [stdacct@nd.edu](mailto:stdacct@nd.edu)  
Web: <http://studentaccounts.nd.edu>

Tuition and fees, as well as any required deposits, are payable in advance at the beginning of each semester. Please note that Notre Dame does not accept credit cards for payment of tuition and fees. Tuition and/or fees not covered by scholarship are the responsibility of the student.

A student may not register for a new semester or receive transcripts, certificates, diploma, or any information regarding his or her academic record until the account has been settled in full.

### Separation from the University

Any student who at any time within the school year wishes to withdraw from the University should contact the Office of the Registrar. To avoid failure in all classes for the semester and in order to receive any financial adjustment, the withdrawing student must obtain the appropriate clearance from

the Dean of his or her college and from the Assistant Vice President for Residence Life.

On the first day of classes, a full tuition credit will be made. Following the first day of classes, the tuition fee is subject to a prorated adjustment/credit if the student (1) withdraws voluntarily for any reason on or before the last day for course discontinuance at the University, or (2) is suspended, dismissed, or involuntarily withdrawn by the University, for any reason, on or before the last day for course discontinuance at the University, or (3) is later obliged to withdraw because of protracted illness, or (4) withdraws involuntarily at any time because of military service, provided no credit is received for the classes from which the student is forced to withdraw.

Upon return of the student forced to withdraw for military service, the University will allow him or her credit for that portion of tuition charged for the semester in which he or she withdrew and did not receive academic credit.

Room and board charges will be adjusted/credited on a prorated basis throughout the entire semester.

Students receiving University and/or Federal Title IV financial assistance who withdraw from the University within the first sixty percent (60%) of the semester are not entitled to the use or benefit of University and/or Federal Title IV funds beyond their withdraw date. Such funds shall be returned promptly to the entity that issued them, on a pro rata basis, and will be reflected on the student's University account.

This Withdrawal Regulation may change subject to federal regulations. Examples of the application of the tuition credit calculation are available from the Office of Student Accounts upon request.

### Housing

Telephone: (574) 631-5878  
Web: <http://housing.nd.edu>

Accommodations for single, married, or parenting graduate students (and their families) are available in the Fischer Graduate Residences adjacent to campus. The apartment complex offers apartments with living space, a kitchen, one full bath, and two bedrooms for \$670 – \$1,340 a month (rent includes utilities, local phone and internet connection). A deposit equal to one month's rent is required.

Fischer Graduate Residences are managed by Bradley Company on behalf of the University. For further information, contact (574) 631-8607 or visit the website at <https://www.fog.bradleyco.com>.

The Landings at Notre Dame is a University-related complex located within walking distance to campus and the Notre Dame Family Resource Center. This complex leases one, two, and three bedroom open-layout apartments with an in-unit washer and dryer, fully equipped kitchen, on-site parking, and convenient shuttle service to campus.

Designed for post-baccalaureate students who are married or parenting, The Landings accepts applications from newly accepted and enrolled graduate students and post-doctoral researchers after May 1 if vacant apartments are available.

The Landings complex is managed by Corvias Property Management. For more information, visit <https://thelandingsatNotreDame.com> or call 574-538-2710.

### Health Insurance

Telephone: (574) 631-6114  
E-mail: [insurancequestions@nd.edu](mailto:insurancequestions@nd.edu)  
Web: <http://uhs.nd.edu>



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The student will be automatically enrolled in the University-sponsored plan, and the charge for the premium will be placed on the student's account prior to the start of the academic year. At the beginning of each academic year, the opportunity is provided to show proof of comparable health insurance coverage. If University Health Services accepts this coverage, the charge for the University-sponsored plan will be removed from the student's account by University Health Services.

Information regarding the University-sponsored plan is mailed to the student's home address in July. Additional information is available in University Health Services by contacting the Office of Insurance and Accounts at (574) 631-6114 or referring to the UHS website: <http://uhs.nd.edu/insurance-billing/>.

The cost of the student premium for the 2020–2021 academic year (effective August 15, 2020, to August 14, 2021) is \$2,792. (Early start: effective August 1, 2020, to August 14, 2021, cost: \$2,899). The insurer for the student health insurance policy is Aetna.

Premium information for dependent coverage may be found on the University Health Services website.

The Office of Student Accounts will offer students receiving a stipend from the University the option of paying the premium through deductions from the academic year stipend payments.

#### **Health Insurance Subsidy Program**

The Graduate School has a program to subsidize the student premium of University-sponsored student health insurance. The subsidy for 2020–2021 is \$2,792 (or \$2,899 for 8/1 early start) for degree-seeking students on full stipend support for both the Fall 2020 and Spring 2021 semesters. Stu-

dents will receive a \$1,396 subsidy (or \$1,449.50 for 8/1 early start) if they are on full stipend support for only one semester. Eligible students who will graduate in January and who enroll in the fall-only plan (cost \$1,063) will receive a \$1,063 subsidy if on a full stipend for the fall term. Eligible students who enroll in the University-sponsored student health insurance between August 15, 2020 and August 14, 2021 and are not charged the full \$2,792 will receive a subsidy pro-rated based on the premium amount. Eligible students who waive the University-sponsored plan by September 15, 2020 will receive a \$200 credit on their student account.

#### **Eligibility**

Doctoral students must be in their first eight years of study to be eligible for a health subsidy. Masters' students must be in their first five years of study to be eligible for a health subsidy. A full stipend is defined as the minimum nine-month or 12-month stipend for each degree level. Students should contact their academic department with questions about their subsidy eligibility or funding levels. The Graduate School provides the departments with the subsidy level and eligibility criteria each year.

#### **Procedure**

No application for the subsidy is required. University Health Services, the Graduate School, Financial Aid and Student Accounts will automatically process the subsidy for eligible students in October. An audit will be performed early in the spring semester to adjust the subsidy for those students whose eligibility changes in the spring semester

#### **Tax Obligation**

Because students receiving a stipend are not classified as employees of

the University, the health insurance subsidy is a taxable benefit. In this case, however, it is regarded as 'taxable but not reportable'. The University will not withhold income tax from a student's subsidy, nor will it report the subsidy to the Internal Revenue Service. Students who receive the subsidy are obligated to self-report the income on their individual income tax returns. Note that the health insurance subsidy may be subject to reporting and withholding if you are an international student

#### **Worker's Compensation Insurance**

Students injured while performing assigned duties in University laboratories are covered by worker's compensation insurance as if they were Notre Dame employees. If a student is injured in this manner, he or she should seek treatment at the Notre Dame Wellness Center, or, if the Wellness Center is closed, at St. Joseph Regional Medical Center. (Students suffering illness or injury not related to assigned duties should visit the University Health Services in St. Liam Hall.)

During a period of temporary inability to perform duties as a result of such injuries, workers compensation provides for continuation of 66.6% (to state limits) of usual income after seven days have passed. Income beyond the limits set by workers compensation is subject to the discretion of department chairs where support is from funds allocated by the Graduate School. Income beyond workers compensation is subject to the discretion of principal investigators and the guidelines of external sponsors where support is from funds provided by research grants.

#### **Travel Accident Insurance**

Students injured while traveling to present at conferences or on other University business which has been approved by the student's department

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chair are covered by Notre Dame travel accident insurance. Compensation in set amounts is available for death or loss of arms or legs. Medical expenses in excess of other insurance are paid up to a maximum dollar amount.

## Financial Support

Exact amounts for the following aid will vary with the type of support and the department. Exact figures can be obtained from the particular department to which the student has been admitted. Initiation and continuation of financial support depends on the student's maintaining good academic standing.

Only full-time, degree-seeking students are eligible for support. Recipients of financial support such as assistantships or fellowships usually may not accept additional appointments. Rare exceptions are made only on the recommendation of the respective department.

## Categories of Support

The University offers three types of financial support to graduate students: assistantships, fellowships, and tuition scholarships. Students may receive one type of support or a combination.

Only full-time, degree-seeking students are eligible for support.

Students must remain in good academic standing to be eligible for continued financial support.

Doctoral students are eligible for assistantships and fellowships funded by the University during their first six years of study. Masters' students are eligible for assistantships and fellowships funded by the University during their first three years of study. There is no eligibility limit for doctoral or masters' students receiving fellowships

and assistantships funded from other sources.

### *Assistantships*

An assistantship is an arrangement in which financial support is given to a graduate student who engages in teaching, research, or professional development activities in furtherance of the University's academic mission as well as his or her holistic development in preparation for a professional career. The University recognizes three kinds of assistantships: Teaching, Project, and Research.

The duration of an assistantship may range from a single academic term to a full year. Assistantships may be full (an expectation of 18 hours/week) or half (an expectation of 9 hours/week). Half assistantships may be combined.

During the term of any kind of assistantship, students are expected to make sustained academic progress towards the degree. For doctoral students, progress includes undertaking research that supports their dissertation or is in preparation for it.

If the types of duties the student will be assigned in a new or existing position do not fall primarily into one of the definitions of assistantships below (Teaching, Project, or Research), then the position should be treated as one of paid employment. [See section below titled Paid Employment.]

### *Teaching Assistantships*

Teaching assistantships are awarded to students who perform duties ranging from reading and grading assignments to running discussion sections or labs, or teaching sections of undergraduate courses. (The latter teaching assistantship is designated as "instructor of record" in the Registrar's course listing.) Assistant Rectors are also classified as teaching assistants, based on their role

contributing to the holistic development of the graduate by providing experience with mentoring, guiding, teaching, counseling undergraduate students and planning programs and initiatives to further the holistic development of the undergraduate students.

The time commitment for teaching assistantship duties may vary from week to week but will have a typical maximum of 18 hours per week and may not exceed 20 hours per week.

### *Project Research Assistantships*

Project assistantships are awarded to students who engage in research or other activities not directly thesis- or dissertation-related but that are part of the student's professional development. Examples are: assistance with computations for a faculty member's research when that faculty member is in a department other than the student's own, development of conference materials, editing a journal, or assisting a faculty member with developing or coordinating a conference.

The expected time commitment for project assistantship duties may vary from week to week, but the typical maximum is 18 hours per week and may not exceed 20 hours per week.

### *Research Assistantships*

Research assistantships are awarded to students who assist faculty members on research programs either at the University or in the field.

If the assistantship is funded through a sponsored agreement, then the graduate student must be conducting activities necessary to the sponsored agreement.

The work performed as a research assistant is not only part of the faculty member's research program but also supports the student's dissertation research or preparation for that research

## FINANCIAL INFORMATION

and is, therefore, in satisfaction of a degree requirement.

For that reason, while the time commitment attributed to the research assistantship duties of a student is considered to be 18 hours per week, because the research being conducted is integral to the dissertation, or preparation for it, the overall time devoted to the research as a whole is expected to be significantly more extensive.

### ***Fellowships***

Fellowships are awarded to assist a student in the pursuit of a degree. No obligation for teaching or research is expected in return. Students who have been awarded fellowships are expected to devote themselves fully to scholarship, research, or the completion of their dissertations.

The duration of a fellowship may range from a single academic term to a full year. Fellowship recipients will be notified by an award letter. Fellowships may be awarded in addition to an assistantship. In these cases, the service requirement is associated with the assistantship portion of the student's total awards.

Note that a fellowship does not exempt a student from a program's academic requirements, such as teaching, although it may change the timing of the satisfaction of the requirement.

### ***Tuition Scholarships***

The University offers full or partial tuition scholarships to students qualifying on the basis of merit.

Doctoral students are eligible for tuition scholarships during their first eight years of study. Masters' students are eligible for tuition scholarships during their first five years of study.

### ***Paid Employment***

If a student's duties in a position do not fall primarily into the assistantship definitions above, he or she should be treated as a paid employee. Examples of positions of paid employment include a clerical or administrative assistant assignment in a department office, working at the circulation desk in a library, or preparing a bibliography for a faculty member.

Students who have been awarded a full assistantship or fellowship may not undertake paid employment with either the University or an outside employer while enrolled. Exceptions may be granted in cases of unique academic or professional benefit, personal benefit, or extreme financial hardship and must have the prior written approval of the graduate student's advisor, director of graduate studies, and the Graduate School. Generally, any exceptions will not exceed 2 hours per week.

Full-time degree-seeking students who are not fully supported may undertake paid employment with either the University or an outside employer while enrolled if they have the prior written approval of the student's advisor, director of graduate studies, and the Graduate School. Generally, for these students as well, the total assistantship, if any, and employment obligations may not exceed 20 hours per week.

Note that under current United States immigration regulations, any international student—whether fully supported or not—who is studying on an F-1 or J-1 visa and seeks employment off-campus for any amount of hours, must obtain written authorization through the appropriate staff member within Notre Dame International.

### ***Summer Employment: Doctoral Students***

At no time in the summer months may the combination of assistantship, fellowship, and paid employment

exceed 20 hours per week unless the student has the prior written approval of the advisor, director of graduate studies and the Graduate School. The requirement (based on current United States immigration regulations) that international students studying on an F-1 or J-1 visa seeking off-campus employment obtain written authorization through the appropriate staff member within Notre Dame International applies in the summer months as well.

### ***Summer Employment: Master's Students***

Students in course-based master's programs have no University-imposed limitations on paid employment when classes are not in session. The requirement (based on current United States immigration regulations) that international students studying on an F-1 or J-1 visa seeking off-campus employment obtain written authorization through the appropriate staff member within Notre Dame International applies during academic-year breaks and in the summer months as well.

### ***Travel Reimbursement***

Reimbursement is subject to University travel policy, which can be found on the Controller's website, under Policies and Procedures: <http://controller.nd.edu>

Applications for the following professional development funds can be found on the Graduate School website: <http://graduateschool.nd.edu/gspda>.

- GSU Conference Presentation Grant Program
- Zahm Research Travel Fund
- Joseph F. Downes Memorial Fund
- Notebaert Professional Development Fund



## Financial Aid

### Veterans Educational Benefits

Telephone: (574) 631-6488  
 E-mail: [wojtyasiak.2@nd.edu](mailto:wojtyasiak.2@nd.edu)  
 Web: [https://registrar.nd.edu/students/veteran\\_affairs.php](https://registrar.nd.edu/students/veteran_affairs.php)

Veterans' benefits are approved by the Indiana State Approving Agency. Students who qualify to use educational benefits can find information on the certification process on the Office of the Registrar's website, [https://registrar.nd.edu/students/veteran\\_affairs.php](https://registrar.nd.edu/students/veteran_affairs.php). Please note that due to the recent passing of the Harry W. Colmery Veterans Educational Assistance Act (Forever GI Bill), the monthly housing allowance will now be determined based on the physical location (zip code) where students attend the majority of their courses. This is particularly relevant for students who participate in internships, externships, student teaching, and practicums. Students participating in a Notre Dame study abroad program will receive the standard housing rate for a foreign institution. For specific information on how this will affect your VA educational benefits or housing rates, please contact the Primary School Certifying Official in the Office of the Registrar, 300 Grace Hall.

### Office of Financial Aid

Telephone: (574) 631-6436  
 E-mail: [fnaid@nd.edu](mailto:fnaid@nd.edu)  
 Web: <http://financialaid.nd.edu>

In addition to the student support programs described above, the Office of Financial Aid, located in 115 Main Building, administers federal and private financial aid programs to assist in the financing of your Notre Dame education.

### Applying for Federal Student Aid

In order to be eligible for federal student assistance, a student must be a U.S. citizen, permanent resident, or eligible noncitizen. In general, students must be classified as degree seeking to participate in the federal aid programs and be enrolled at least half-time. The Free Application for Federal Student Aid (FAFSA) is the annual application required for consideration for all federal financial aid programs. Complete the application online, listing Notre Dame (Federal School Code 001840) in the appropriate section. Priority processing consideration will be given for those applicants submitting the FAFSA by February 28. If eligible, students are strongly encouraged to use the IRS Data Retrieval Tool option when completing the FAFSA. Choosing to use this option will streamline completion of federal verification requirements and expedite the review of your financial aid application.

### Academic Standing and Satisfactory Progress

The U.S. Department of Education requires students to maintain satisfactory progress toward completing their degree in order to receive financial aid. Satisfactory academic progress requirements for financial aid recipients may not be the same as the University's requirements for academic good standing. Students are required to maintain a minimum cumulative grade point average, be on pace to graduate, and complete their degree within a maximum time frame. All semesters of enrollment are reviewed regardless of whether aid was received. Additional details may be obtained from the Office of Financial Aid website.

### Federal Direct Loan

The terms of the non-need-based Unsubsidized Federal Direct Loan Program require that the borrower

repay, with interest, this source of financial assistance. This program is referred to as "unsubsidized" because the federal government is not paying the in-school interest to the lender while the student is enrolled in school. Interest on the Unsubsidized Direct Loan begins to accrue after disbursement of the loan funds; however, the student may choose to have the payment of the interest deferred during enrollment and later capitalized (added to the principal) at the time repayment begins. For a list of additional terms of the Unsubsidized Direct Loan, visit the Office of Financial Aid website.

The amount a student may borrow from the Direct Loan Program may be limited by other financial assistance received by the student. Financial assistance includes, but is not limited to, the following: fellowships, assistantships, University scholarships, tuition remissions, all types of grants, residence hall appointments, need-based employment, and any loan received under the auspices of the Higher Education Act as amended. Should a student's eligibility be impacted at any time during the loan period, the Direct Loan will be subject to adjustment. All eligibility changes will be reported to the student's lender.

### Federal Direct PLUS Loan

The Federal Direct PLUS Loan provides a borrowing option for graduate/professional students. Based upon the borrower's credit history, a student may borrow through this federally guaranteed, non-need-based loan program. Direct PLUS Loan applications are subject to Department of Education credit review. The maximum PLUS loan amount is the full cost of attendance minus all other financial aid. Repayment begins after the loan is fully disbursed or may be deferred while the student is enrolled in school. For a list of additional terms of the

Direct PLUS Loan, visit the Office of Financial Aid website.

***Private Student Loans***

After exhausting the opportunities available from the federal aid programs, many students will consider private loan programs as a source of funding.

The terms and conditions of these credit-based loan programs vary, and as such, students are encouraged to review the details of the programs before selecting a private loan program. Private loans are not eligible for loan consolidation programs made available for federal student loans. Interest rates, fees (both at the time of borrowing and at repayment), credit checks, and annual and aggregate loan limits require careful evaluation by the student as a consumer.



# THE DIVISION OF ENGINEERING

## AEROSPACE AND MECHANICAL ENGINEERING

### Chair:

Kenneth C. Christensen

### Director of Graduate Studies:

David B. Go

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Location: 365 Fitzpatrick Hall

E-mail: [amedept@nd.edu](mailto:amedept@nd.edu)

Web: <http://ame.nd.edu>

Current research efforts in the program in aerospace and mechanical engineering are within the areas of:

- bioengineering: biomedical engineering, tissue engineering, and mechanobiology
- computational engineering: multiphysics simulations, machine learning, and scientific computing
- fluid mechanics: flow physics and aerodynamics, materials and thermal sciences; and
- manufacturing: additive and advanced manufacturing, and robotics and controls.

The programs of study and research lead to the degrees of master of science in aerospace engineering (MSAE),

master of science in mechanical engineering (MSME), and doctor of philosophy (Ph.D).

Every degree-seeking student is required to participate in the academic programs of the department by performing a teaching-related assignment.

For specific course, project and examination details required for each degree, refer to the program's graduate handbook.

### The Master of Science in Aerospace Engineering or Mechanical Engineering

Degree Requirements	
GPA	18 credits (research)
Credits	24 credits (non-research)
Total Credits	30 credits
Other	Candidacy examination
	Master's thesis or project

The master of science programs (MSAE and MSME) lead toward proficiency and creative talent in the application of basic and engineering sciences to relevant problems in the two engineering disciplines.

Students wishing to complete a research master's degree are required to submit a written thesis. Those wishing to complete a non-research, coursework-only program are required

to submit a research or design project with a project report. In general, students are encouraged to follow the research path.

### The Doctor of Philosophy

Degree Requirements	
GPA	30 credits
Credits	
Total Credits	60 credits
Other	Qualifying examination
	Candidacy examination
	Doctoral dissertation

The doctoral program strives to prepare students for creative and productive scholarship. It is designed to suit each student's interests and gives students the opportunity to conduct individual research under the supervision of the department faculty.

### Examinations

A written and oral qualifying exam is used to assess student readiness to pursue a Ph.D. and must be completed prior to the beginning of the fourth semester, typically in the summer following the first year. An oral candidacy exam is completed after approximately three years of study; completion of the candidacy exam advances the student to the status of Ph.D. candidate. At the conclusion of the program, the stu-

dent's research and research findings are presented as a Ph.D. dissertation and in an oral defense.

## Tenured and Tenure-Track Faculty

Robert Bernhard, Professor

Hsueh-Chia Chang, Concurrent Professor

Kenneth Christensen, Viola D. Hank Professor and Department Chair

Thomas C. Corke, Clark Equipment Professor

Harindra J. Fernando, Concurrent Professor

David B. Go, Rooney Family Collegiate Professor and Director of Graduate Studies

J. William Goodwine, Professor and Director of Undergraduate Studies

Stanislav Gordeyev, Associate Professor

Maria Holland, Clare Booth Luce Assistant Professor

Donny Hunjaya-Putra, Assistant Professor

Thomas Juliano, Associate Professor

Eric J. Jumper, Roth Gibson Professor

Andrew Kennedy, Concurrent Professor

Edward C. Kinzel, Associate Professor

Tengfei Luo, Professor

Karel Matous, Professor

Scott C. Morris, Professor and Director of the Institute for Flow Physics and Control

Svetlana Neretina, Associate Professor

Glen L. Niebur, Professor

Timothy C. Ovaert, Professor

Mark Plecnik, Assistant Professor

Joseph M. Powers, Professor

Matthew Ravosa, Concurrent Professor

David Richter, Concurrent Associate Professor

Ryan K. Roeder, Professor

Hirota Sakaue, Associate Professor

James P. Schmiedeler, Professor and Associate Department Chair

Michael M. Stanisic, Associate Professor

Alexandros Taflanidis, Concurrent Professor

Flint O. Thomas, Professor

Jian-Xun Wang, Assistant Professor

Meng Wang, Professor

Patrick Wensing, Assistant Professor

Joannes Westerink, Concurrent Professor

Sangpil Yoon, Assistant Professor

Nicholas Zabaraz, Viola D. Hank Professor

Matthew J. Zahr, Assistant Professor

Yanliang Zhang, Associate Professor

Pinar Zorlutuna, Sheehan Family Associate Professor

## BIOENGINEERING

### Director:

Glen L. Niebur

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Location: 147 Multidisciplinary Research Building

E-mail: [bioeng@nd.edu](mailto:bioeng@nd.edu)

Web: <http://bme.nd.edu>

Bioengineering lies at the intersection of the life sciences and the traditional disciplines of chemical, civil, computer, mechanical and electrical engineering.

Bioengineering research at Notre Dame includes biomedical applications, such as regenerative medicine, tissue mechanics, human body motion control, bone fracture repair, orthopaedic devices, micro- and nanoscale diagnostic devices and instrumentation, molecular medicine, medical imaging and image processing algorithms, and bioinformatics. The bioengineering program also includes environmental science research such as biological water treatment, bacteria-mineral interactions and bioremediation.

For specific requirements regarding the coursework required, see the program handbook.

## The Master of Science

Degree Requirements	
GPA Credits	18 credits
Total Credits	24 credits
Other	Comprehensive oral exam
	Master's thesis or project

Students wishing to complete a research master of science degree are required to submit a written thesis. Those wishing to complete a non-research, coursework-only program are required to submit a research or design project with a project report.

The master of science degree may be awarded to Ph.D. students who complete the course requirements and pass the written and oral Ph.D. candidacy examination.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	27 credits
Total Credits	72 credits
Other	Comprehensive qualifying examination
	Dissertation proposal
	Dissertation proposal defense
	Dissertation defense
	Dissertation submission to Graduate School
	Teaching assistant service

The Ph.D. program has been designed to emphasize depth of knowledge in a single traditional engineering discipline, while incorporating additional coursework to provide a strong foundation in the biological sciences.

Students complete a minimum of nine courses (27 credit hours). Degree plans are designed in cooperation with the student's advisor. The ideal plan of study ensures that the student will receive adequate instruction in both engineering and biological sciences, and also maintain a necessary flexibility in preparing the student for potential career paths.

A zero-credit bioengineering seminar during all semesters in residence, to explore recent advances across the spectrum of bioengineering research. One seminar each semester will be devoted to topics in bioethics with emphasis on contemporary questions in bioethics (e.g. stem cells, human subjects, and the use of animals in research).

## Examinations

After the second semester of residence, each student must pass the comprehensive qualifying examination. The student presents written and oral reports based on literature review and research. These reports, along with performance in courses, in research, and in teaching assistantship duties, constitute the comprehensive evaluation. This allows the faculty to evaluate the student's grasp of bioengineering fundamentals and his or her ability to perform original, independent research. Students who pass the comprehensive evaluation may continue to the Ph.D. program.

Students normally take the oral candidacy examination before the end of the seventh semester in residence. This examination comprises a written dissertation proposal of research and an oral defense of the dissertation proposal, which may also cover course and research related topics, but is focused on planned research.

## CHEMICAL AND BIOMOLECULAR ENGINEERING

### Chair:

William A. Schneider

### Director of Graduate Studies:

William F. Phillip

Telephone: (574) 631-5580

Fax: (574) 631-8366

Location: 182 Fitzpatrick Hall

E-mail: [cbe@nd.edu](mailto:cbe@nd.edu)

Web: <http://cbe.nd.edu>

The department offers programs leading to the degrees master of science in chemical engineering (M.S.Ch.E.) and doctor of philosophy (Ph.D.). The aim of the graduate program is to prepare qualified candidates for research, development, teaching, and other professional careers in chemical and biomolecular engineering. Thus, the Ph.D. program is emphasized.

There is no foreign language requirement for either the M.S. or Ph.D.

All first- and second-year graduate students are assigned teaching assistant duties. These duties consist of holding office hours, conducting recitation sections for lecture courses, supervising laboratory courses, and/or grading homework.

For specific course requirements related to each degree, refer to the program handbook.

## The Master of Science in Chemical Engineering

Degree Requirements	
GPA Credits	15 credits
Total Credits	30 credits
Other	Admission to candidacy
	Candidacy examination
	Master's thesis

The master of science degree, with thesis, requires 15 credit hours of graduate coursework (5 courses) with a minimum 3.0 grade point average, and 15 credit hours of thesis research and graduate seminar. The results of the research are presented as a Master's thesis and defended in a final oral defense.

A student pursuing the Ph.D. degree will be eligible to receive an M.S. degree after completing five semesters in the Ph.D. program, passing the Ph.D. candidacy exam, and preparing and submitting for publication a research paper in collaboration with the student's research advisor(s). This paper shall describe work in which the student has a primary (not supporting) role, be submitted to a research journal or to the proceedings of a technical conference, and be subject to peer review.

Full-time students with a background in chemical engineering ordinarily complete these requirements in 16 to 24 months.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	24 credits
Total Credits	60 credits
Other	Comprehensive evaluation
	Candidacy examination
	Admission to candidacy
	Doctoral dissertation

The Ph.D. requires 24 credit hours of graduate coursework (8 courses) with a minimum 3.25 grade point average, and 36 hours of thesis research and graduate seminar. Students entering with a M.S. degree, earned within five

years of admission and from a recognized graduate institution, may transfer up to 24 credit hours, provided that the transferred credits satisfy departmental guidelines for coursework distribution and grade point average.

The student is admitted to doctoral candidacy after passing the candidacy examination. This examination, ordinarily completed during the fifth semester in residence, consists of a written and oral presentation of thesis research to the student's dissertation committee.

After reaching candidacy, the student devotes essentially all efforts to completing his or her thesis research. The results of the research are presented as a Ph.D. dissertation and orally defended before the student's dissertation committee.

Full-time students normally complete the Ph.D. degree requirements in about five years beyond the bachelor's degree.

## Tenured and Tenure-Track Faculty

Basar Bilgicer, Associate Professor

Paul W. Bohn, Arthur J. Schmitt  
Professor of Chemical and Biomolecular Engineering

Merlin L. Bruening, Donald and Susan Rice Professor of Engineering

Hsueh-Chia Chang, Bayer Corporation Chair of Chemical Engineering

Yamil Colón, Assistant Professor

Alexander W. Dowling, Assistant Professor

Ruilan Guo, Freimann Collegiate Associate Professor of Engineering and Director of Graduate Admissions

Jason C. Hicks, Earley Collegiate Associate Professor

Davide A. Hill, Associate Professor

Jeffrey C. Kantor, Professor

David T. Leighton Jr., Professor

Edward J. Maginn, Department Chair and Dorini Family Chair of Energy Studies

Mark J. McCready, Senior Associate Dean for Research and Graduate Studies and Professor

Paul J. McGinn, Keough-Hesburgh Chair of Engineering

Nosang V. Myung, Keating Crawford Professor

Casey P. O'Brien, Assistant Professor

William A. Phillip, Director of Graduate Studies and Associate Professor

Jennifer L. Schaefer, Assistant Professor

William F. Schneider, Department Chair and Dorini Family Chair of Energy Studies

Yichun Wang, Assistant Professor

Matthew J. Webber, Assistant Professor

Jonathan Whitmer, Associate Professor

Jeremiah J. Zartman, Associate Professor

## CIVIL AND ENVIRONMENTAL ENGINEERING AND EARTH SCIENCES

### Chair:

Johannes J. Westerink

### Director of Graduate Studies:

James Alleman (M.Eng. program)

Diogo Bolster (Ph.D. program)

Telephone: (574) 631-5380

Fax: (574) 631-9236

Location: 156 Fitzpatrick Hall

E-mail: [ceees@nd.edu](mailto:ceees@nd.edu)

Web: <http://ceees.nd.edu>

All students participate in the educational mission of the department by serving as teaching assistants for eight hours per week during their first year, four hours per week during their second year, and, for continuing students, four hours per week during one additional semester.

Note: Students admitted under the former program name, Civil Engineering and Geological Sciences (CEGS), will receive their degrees under the CEGS program unless they request a formal change to their program status.

### The Master of Engineering (Professional Degree)

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Admission to candidacy

Degree Requirements	
	Candidacy examinations

Notre Dame's professional master of engineering (M.Eng.) degree is aligned with professional practice goals rather than a research-focused Ph.D. path. The M.Eng. program offers two concentrations: structural engineering and environmental engineering. Each track requires 24 credits of coursework in a distinct technical core curriculum, supplemented by eight credits of professional development coursework in project management and professional practice.

For specific details regarding degree and course requirements, refer to the program's handbook.

### The Master of Science in Civil Engineering, Environmental Engineering, or Earth Sciences

Degree Requirements	
GPA Credits	16 credits
Total Credits	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis

The program in civil and environmental engineering and earth sciences offers a master of science in civil engineering (MSCE, master of science in environmental engineering (M.S.Env.E.), and master of science in earth sciences (MSES).

Students must spend a minimum of two semesters at the University and

are expected to complete all degree requirements except defense of the thesis within three semesters. The master of science degrees require 30 semester credit hours, including at least 16 to 24 credits of formal graduate coursework, with the remaining credits earned through research.

An overall grade point average of at least 3.0 must be achieved for graduation.

Although both research and non-research options are available to students seeking a master's degree, the research option is the preferred and normal route. The non-research option is allowed only in exceptional circumstances.

In the research option, 30 credit hours are required with six to 14 of these credits devoted to thesis research, depending on the program of study developed in conjunction with the department. The research option requires a completed master's thesis and an oral defense of that thesis. The master's research is commonly completed by the end of the fourth semester of enrollment.

### The Doctor of Philosophy

Degree Requirements	
GPA Credits	18 credits
Total Credits	72 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

To earn a Ph.D. in the program, students are expected to devote a minimum of three full academic years to study and research beyond the bachelor's degree. A total of 72 semester



credit hours, with at least 18 credit hours of formal graduate coursework, are required for the Ph.D. Students are expected to complete all degree requirements in approximately four years.

Coursework requirements are established by a Ph.D. advisory committee assigned to each student. The course selections are in part determined by the student's area of interest, and students are encouraged to fulfill a portion of the course requirements in related disciplines outside the Department of Civil and Environmental Engineering and Earth Sciences. For specific details regarding course requirements, see the program's handbook.

Students are required to pass a written examination demonstrating advanced skills in civil and environmental engineering or earth sciences and an oral candidacy examination in the student's major areas of study. The successful defense and submission of a written dissertation is the final requirement for the Ph.D.

## Tenured and Tenure-Track Faculty

Melissa Berke, Assistant Professor

Kyle J. Bibby, Associate Professor and Wanzek Collegiate Chair

Diogo Bolster, Professor and Frank M. Freimann Collegiate Chair in Hydrology and Director of Graduate Studies

Peter C. Burns, Henry J. Massman Jr. Professor

Kenneth Christensen, Professor and the College of Engineering Collegiate Chair in Fluid Mechanics

Paola Crippa, Assistant Professor

Patricia J. Culligan, Matthew H. McCloskey Dean of the College of Engineering, Professor of Civil Engineering

Kyle Doudrick, Associate Professor

Jeremy B. Fein, Professor and Director of the Center for Environmental Science and Technology

Harinda J. Fernando, Wayne and Diana Murdy Professor

Alan Hamlet, Associate Professor

Amy Hixon, Associate Professor

Ahsan Kareem, Robert M. Moran Professor

Andrew Kennedy, Professor

Kapil Khandelwal, Associate Professor

Tracy Kijewski-Correa, Associate Professor and Leo E. and Patti Ruth Linbeck Collegiate Chair

Yahya C. Kurama, Professor and Associate Chair

Marc Francois Muller, Assistant Professor

Clive R. Neal, Professor

Robert Nerenberg, Professor

David Richter, Associate Professor

Joshua D. Shrouf, Associate Professor

Antonio Simonetti, Associate Professor

Alexandros A. Taflanidis, Associate Professor and Frank M. Freimann Collegiate Chair in Structural Engineering

Ashley P. Thrall, Myron and Rosemary Noble Associate Professor of Structural Engineering

Na Wei, Assistant Professor

Joannes J. Westerink, Joseph and Nona Ahearn Professor in Computations

al Science and Engineering and Henry J. Massman Chairman

## COMPUTER SCIENCE AND ENGINEERING

### Chair:

Patrick J. Flynn

### Director of Graduate Studies:

Jane Cleland-Huang

Telephone: (574) 631-8802

Fax: (574) 631-9260

Location: 326 Cushing Hall

E-mail: [cse-grad-info@nd.edu](mailto:cse-grad-info@nd.edu)

Web: <http://cse.nd.edu>

The department offers programs of study and research leading to the degrees of master of science in computer science and engineering (MSCSE) and the doctor of philosophy (Ph.D.).

## The Master of Science in Computer Science and Engineering

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Candidacy examination
	Master's thesis (research)
	Master's project (non-research)

The MSCSE program is focused on coursework and results in advanced technical competency in a focused area of computer science. Students in the master's program take 24 credits of courses, and complete a two-semester project or thesis. The student must

successfully pass an oral thesis defense examination prior to the formal submission of the master's thesis.

A full-time student can complete these requirements in three regular academic semesters plus the summer, although the majority of students take four semesters.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	24 credits
Total Credits	60 credits
Other	Candidacy examination
	Doctoral dissertation

The Ph.D. program is focused on research and leads to a research career in the academy, industry, or government. Students in the Ph.D. program are generally supported as a research or teaching assistant, take classes part-time, and focus on research under the supervision of a faculty advisor. The Ph.D. program is open to students holding either a B.S. or M.S. degree.

Doctoral students holding a master of science degree are normally required to accumulate a minimum of 12 course credits beyond the previous degree. Students are encouraged to pursue coursework outside the department whenever such studies support their program in the major field. For additional details regarding course requirements, see the program's handbook.

Students must pass the Ph.D. qualifying examination in the second spring semester after entering the program.

The candidacy examination, consisting of both written and oral exams, takes place after the completion of the formal coursework. After passing the

Ph.D. candidacy, the student devotes essentially all efforts to completing his or her dissertation research, culminating in the successful defense and submission of the doctoral dissertation.

The doctoral program normally requires four to five years of full-time work.

## Tenured and Tenure-Track Faculty

Richard E. Billo, Professor and Associate Vice President for Research

Kevin Bowyer, Schubmehl-Prein Professor, and Concurrent Professor of Electrical Engineering

Nitesh V. Chawla, Frank M. Freimann Collegiate Professor

Danny Z. Chen, Professor

David Chiang, Associate Professor

Jane Cleland-Huang, Professor and Director of Graduate Studies

Adam Czajka, Assistant Professor

Patrick J. Flynn, Professor and Department Chair, and Duda Family Professor of Engineering

Xiaobo Sharon Hu, Professor

Meng Jiang, Assistant Professor

Siddharth Joshi, Assistant Professor of Computer Science and Engineering and Concurrent Assistant Professor of Electrical Engineering

Taeho Jung, Assistant Professor

Peter M. Kogge, the Ted H. McCourtney Professor of Computer Science and Engineering and Concurrent Professor of Electrical Engineering

Gregory Madey, Research Professor

Collin McMillan, Associate Professor

Ron Metoyer, Associate Professor and Assistant Dean of Diversity and Special Initiatives for the College of Engineering

Tijana Milenkovic, Associate Professor

Michael Niemier, Associate Professor

Christian Poellabauer, Associate Professor

Walter Scheirer, Associate Professor

Yiyu Shi, Associate Professor

Aaron Striegel, Professor

Douglas Thain, Professor and Associate Department Chair

Chaoli Wang, Associate Professor

Dong Wang, Associate Professor

Timothy Weninger, Assistant Professor

## ELECTRICAL ENGINEERING

### Chair:

Gregory Snider

### Director of Graduate Studies:

J. Nicholas Laneman

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Fax: (574) 631-4393

Location: 275 Fitzpatrick Hall

E-mail: [eegrad@nd.edu](mailto:eegrad@nd.edu)

Web: <http://ee.nd.edu>

The program in electrical engineering offers programs leading to the master of science in electrical engineering (MSEE) and the doctor of philosophy (Ph.D.).

## The Master of Science in Electrical Engineering

Degree Requirements	
GPA	18 credits (research)
Credits	30 credits (non-research)
Total Credits	30 credits
Other	Qualifying examination
	Master's thesis (research)

A research master of science in electrical engineering (MSEE) requires 30 credit hours beyond the bachelor of science, with at least six credit hours coming from thesis research. A research master's degree also requires the completion and defense of a master's thesis.

A non-research MSEE requires 30 credit hours of coursework. All students must take a written qualifying examination at the end of their second semester of graduate study; successful completion of the exam is required to receive a master's degree.

## The Doctor of Philosophy

Degree Requirements	
GPA	36 credits
Credits	60 credits
Total Credits	60 credits
Other	Qualifying examination
	Candidacy examinations
	Doctoral dissertation

To continue to the Ph.D. program, students must pass the qualifying exam and secure support from a faculty advisor before the start of their third semester. Doctoral students must accumulate a minimum of 36 course credits beyond the B.S. degree, pass

the qualifying and candidacy examinations, spend at least two years in resident study, and write and defend a Ph.D. dissertation.

## Tenured and Tenure-Track Faculty

Panos Antsaklis, H. C. and E. A. Brosey Professor of Electrical Engineering

Peter Bauer, Professor

Gary Bernstein, Frank M. Freimann Professor of Electrical Engineering

David Burghoff, Assistant Professor

Jonathan Chisum, Assistant Professor

Suman Datta, Stinson Professor of Nanotechnology

Patrick Fay, Professor

Thomas E. Fuja, Professor

Vijay Gupta, Professor

Martin Haenggi, Frank M. Freimann Chair Professor

Douglas Hall, Associate Professor

Christopher Hinkle, Bettex Collegiate Chair and Associate Professor

Bertrand Hochwald, Frank M. Freimann Chair Professor

Anthony Hoffman, Associate Professor

Scott Howard, Associate Professor

Yih-Fang Huang, Senior Associate Dean for Education & Undergraduate Programs and Professor

J. Nicholas Laneman, Associate Chair for Graduate Studies and Professor

Michael Lemmon, Professor

Craig Lent, Frank M. Freimann Chair Professor

Hai Lin, Professor

Lei Liu, Associate Professor

Christine Maziar, Vice President and Senior Associate Provost of the University and Professor of Electrical Engineering

Thomas O'Sullivan, Assistant Professor

Wolfgang Porod, Frank M. Freimann Chair Professor

Ken Sauer, Associate Professor

Alan Seabaugh, Frank M. Freimann Chair Professor

Roxana Smarandache, Professor of Mathematics and Electrical Engineering

Gregory Snider, Department Chair and Professor

Robert Stevenson, Associate Chair for Undergraduate Studies and Professor

Gregory Timp, Kough-Hesburgh Chair in Electrical Engineering and Biological Sciences

## ENGINEERING AND LAW DUAL DEGREE PROGRAM

Degree Requirements	
GPA	75 credits (law)
Credits	24 credits (STEM)
Total Credits	99 credits
Other	Must be candidate for the juris doctor
	Admission to master's candidacy
	Master's examination

*Note: This master of engineering program is distinct from the professional M.Eng. offered by the Department of Civil and Environmental Engineering and Earth Sciences, and is not available as an individual degree program.*

The dual degree program in engineering and law is designed for law students who are interested in pursuing careers in areas such as patent, environmental, telecommunications, or similar law specialties. To be eligible for the master of engineering degree, the candidate must have a B.S. in an ABET accredited engineering or computer science program and must also be a candidate for the juris doctor (J.D.) degree in the Notre Dame Law School.

To be awarded both the J.D. and the M.Eng., the candidate must complete a minimum of 99 credit hours, 75 in law and 24 in the engineering program. The engineering degree awarded will be the master of engineering with a concentration in one of the engineering disciplines offered in Notre Dame's division of engineering. The coursework-only master's program requires the completion of 24 credit hours of engineering, mathematics, or science courses acceptable to the appropriate engineering department; six credit hours of appropriate law courses; and a master's examination.

Courses for the M.Eng. will be chosen in consultation with an advisor in the student's engineering department. The recommended distribution of engineering courses in the Law School curriculum is one each semester during the first and third years of study and two each semester during the second year.

Notre Dame law students interested in obtaining the dual degree in engineering should contact the Graduate School's Office of Graduate Admissions for more information.

## MATERIALS SCIENCE AND ENGINEERING

### Director of Graduate Studies:

Alan Seabaugh

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Location: 206 Cushing Hall

E-mail: [mse-list@nd.edu](mailto:mse-list@nd.edu)

Web: <https://nano.nd.edu/materials-science>

The materials science and engineering (MSE) doctoral program aims to further the interdisciplinary understanding of materials through collaborative research.

### The Doctor of Philosophy

Degree Requirements	
GPA	9 credits of MSE courses;
Credits	Refer to home program
Total Credits	9 credits of MSE courses;
	Refer to home program
Other	Qualifying examination
	Candidacy examinations
	Doctoral dissertation

Notre Dame's materials science and engineering doctoral program is a distinctive, interdisciplinary Ph.D. program offered in collaboration with seven graduate programs in the College of Engineering and College of Science. One of the following programs should be designated as the student's home program:

- Aerospace and Mechanical Engineering
- Bioengineering

- Chemical and Biomolecular Engineering
- Chemistry and Biochemistry
- Civil and Environmental Engineering and Earth Sciences
- Electrical Engineering
- Physics

In addition to the home program's degree requirements for coursework, qualifying and candidacy examinations, and the doctoral proposal and defense, students must also complete:

- Nine credit hours selected from the materials science and engineering course list;
- Submission of the dissertation proposal to the materials science and engineering steering committee for approval;
- Submission of a doctoral dissertation with a significant materials component, as approved by the steering committee.

If all degree requirements for both the home program and the MSE program are completed, the student's transcript will reflect the interdisciplinary nature of the degree (e.g., Aerospace and Mechanical Engineering; Materials Science and Engineering).

### Course Requirements

Materials science and engineering students are expected to meet the coursework requirements of the home department or program. In addition, students will take a minimum of nine credit hours from a designated set of materials science and engineering graduate courses. Two of the three materials science and engineering-focused courses must be from outside the student's home program.



## Doctoral Dissertation

In addition to meeting the requirements of the student's home program, a materials science and engineering student must complete a doctoral dissertation that has a significant materials component.

Upon entering the program, the student should submit the title and up to a one-page overview of their proposed research. The steering committee will review the proposed research and determine if it is appropriate for the program. If a dissertation topic is not approved by the steering committee and the difference cannot be successfully resolved, then the request can be appealed in writing to the executive committee.

Students are expected to follow the candidacy examination policy guidelines as set out in the home department or program policies. To ensure the proposal still aligns with the student's research upon entering the program, the student should submit a copy of the candidacy proposal to both the steering committee and the candidacy review committee in their home department or program.

Students should follow the dissertation and defense policy guidelines as set in the home department or program policies. Additionally, each student must submit a review copy of the dissertation to both the steering committee and the home program's defense committee in preparation for defense. The steering committee will review the dissertation to ensure it still aligns with the student's research upon entering the program.

For additional information regarding coursework, examinations, and other requirements for this Ph.D., refer to the relevant home program and materials science and engineering graduate student handbooks.

## Associated Faculty

The materials science and engineering doctoral program is governed by three committees: the Academic Committee, the Executive Committee, and the Steering Committee.

### Academic Committee

Badih Assaf, Assistant Professor, Physics

Gregory Hartland, Committee Chair, Professor, Chemistry and Biochemistry

Craig Lent, Professor, Electrical Engineering

Paul McGinn, Committee Co-chair, Professor, Chemical and Biomolecular Engineering

Clive Neal, Professor, Civil and Environmental Engineering and Earth Sciences

Svetlana Neretina, Associate Professor, Aerospace and Mechanical Engineering

### Executive Committee

Peter C. Burns, Professor, Civil and Environmental Engineering and Earth Sciences

Ruilan Guo, Associate Professor, Chemical and Biomolecular Engineering

Boldizar Janko, Professor, Physics

Masaru Kuno, Committee Co-chair, Professor, Chemistry and Biochemistry

Glen Niebur, Professor, Aerospace and Mechanical Engineering; Bioengineering

Alan Seabaugh, Director of Graduate Studies, Committee Chair, and Professor, Electrical Engineering

## Steering Committee

Morten Eskildsen, Committee Chair, Professor, Physics

Jeremy Fein, Professor, Civil and Environmental Engineering and Earth Sciences

Anthony Hoffman, Associate Professor, Electrical Engineering

Prashant Kamat, Professor, Chemistry and Biochemistry

William Phillip, Associate Professor, Chemical and Biomolecular Engineering

Ryan Roeder, Committee Co-chair, Professor, Aerospace and Mechanical Engineering; Bioengineering



# THE DIVISION OF HUMANITIES

## ART, ART HISTORY, AND DESIGN

### Chair:

Richard Gray

### Director of Graduate Studies:

Maria Tomasula

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Location: 306 Riley Hall

E-mail: [art@nd.edu](mailto:art@nd.edu)

Web site: <http://artdept.nd.edu>

The Department of Art, Art History, and Design typically admits students to the master of fine arts (MFA) degree in studio art or design; students who are not accepted to degree candidacy in the MFA program or choose to leave the MFA program, may instead earn a master of arts (M.A.) degree.

Art studio and design students may concentrate in ceramics, visual communication design, industrial design, painting, photography, and sculpture, or in a combination of these disciplines. In addition to specific courses, graduate students pursue an area of interest through a system of independent study with a faculty advisor and a graduate committee selected by the student. MFA students are expected to develop a personal direction that culminates in a professional exhibition of visual work.

## The Master of Fine Arts: Studio Art and Design

Degree Requirements	
GPA Credits	30 credits
Total Credits	60 credits
Other	Admission to candidacy
	Written thesis
	Exhibition of creative work

The MFA offers concentrations in studio art or design, and is open to artists and designers with exceptional talent and strong academic skills. The program combines studio work with academic studies in art and design history and criticism. The College Art Association and most other professional institutions of higher education recognize the MFA as the terminal degree for artists and designers. This degree has become the standard prerequisite for those who intend to teach at the college level. It is also appropriate for individuals seeking to further develop their professional careers as artists and designers.

The MFA degree is a studio and research degree that requires three years or six semesters of study and 60 graduate credit hours with a B (3.0) or better average. Progress in the fine arts program is dependent upon admission to MFA candidacy, the successful completion of a written thesis approved by the student's thesis com-

mittee, and the completion of a thesis project — an exhibition of creative work that is approved by the entire art and design faculty.

For additional residency, course and seminar requirements, consult the program's handbook.

## The Master of Arts: Studio Art and Design

Degree Requirements	
GPA Credits	30 credits
Total Credits	40 credits
Other	Admission to candidacy

The non-research master of arts degree (M.A.) program in studio art and design is granted to MFA students who either are not admitted to MFA candidacy or choose to leave the MFA program with an M.A. degree. The department does not regularly admit students to this program. The non-research M.A. degree requires 40 graduate credits.

For additional residency, course and seminar requirements, consult the program's handbook.

## Tenured and Tenure-Track Faculty

Clinton Carlson, Associate Professor

Rev. Austin I. Collins, C.S.C., Professor

Ann-Marie Conrado, Associate Professor

Richard Gray, Chair and Associate Professor

Marius Hauknes, Assistant Professor

Heather Hyde Minor, Professor

William J. Kremer, Professor

Jason R. Lahr, Associate Professor

Martina Lopez, Professor

Martin L. Nguyen, C.S.C., Associate Professor

Tatiana Reinoza, Assistant Professor

Robin F. Rhodes, Associate Professor

James Rudolph, Assistant Professor

Michael Schreffler, Associate Professor

Scott Shim, Professor

Maria Tomasula, Michael P. Grace Professor of Art and Director of Graduate Studies

Neeta Verma, Robert P. Sedlack, Jr. Associate Professor

Nicole L. Woods, Assistant Professor

## CLASSICS

### Chair:

Luca Grillo

### Director of Graduate Studies:

David Hernandez

Telephone: (574) 631-7195  
 Fax: (574) 631-2153  
 Location: 304 O'Shaughnessy  
 Email: [classics@nd.edu](mailto:classics@nd.edu)  
 Web: <http://classics.nd.edu/>

## The Master of Arts

Degree Requirements	
GPA Credits	30 credits
Total Credits	36 credits
Other	Admission to candidacy
	Ancient language requirements
	Modern language requirement
	Comprehensive examinations or a written thesis

Students must complete 36 credits over two years in the master of arts program. The curriculum is well-defined, but includes room for adjustment based on students' individual needs and interests. The details of any particular student's coursework will depend on the director of graduate studies in consultation with the graduate committee.

Students can choose from several areas of emphasis, including language and literature, history, late antiquity, and philosophy.

In addition to completing all course requirements, students will be expected to read a list of texts in preparation for their examinations and for further study in the field of classics. This reading list will be compiled with a view to the needs and interests of individual students by the director of graduate studies and the graduate committee.

## Examinations

Students will be required to take examinations in Greek and Latin translation at the beginning of their fourth semester, with the possibility of taking the exam again in the spring. The exam will be based on a standard reading list of core texts, plus supplemental texts chosen by each individual student.

Since German, French and Italian are of major importance for research, all students will be required to demonstrate reading proficiency in one of these languages by passing an appropriate examination.

Students choosing not to write a thesis will be required to take a comprehensive written and oral examination at the end of the fourth semester. Unlike the Greek and Latin examinations, the comprehensive examination will focus on broad topics pertaining to classical history, literature, and culture.

## Thesis

With program permission, students will have the option of writing a final master's thesis in a 3-credit or 6-credit version. Students intending to go on to a Ph.D. program are advised to exercise this option.

Students writing a thesis are not required to take the comprehensive examination.

## Tenured and Tenure-Track Faculty

Christopher A. Baron, Associate Professor

W. Martin Bloomer, Professor of Classics

Luca Grillo, Associate Professor of Classics and Chair

David Hernandez, Associate Professor of Classics and Director of Graduate Studies

Brian Krostenko, Associate Professor of Classics

Blake Leyerle, Associate Professor of Theology

Elizabeth Forbis Mazurek, Associate Professor of Classics

Hildegund Müller, Associate Professor of Classics

David O'Connor, Professor of Philosophy

Gretchen Reydam-Schils, Professor, Program of Liberal Studies

Robin Rhodes, Associate Professor of Art History

Catherine Schlegel, Associate Professor of Classics

Christopher Shields, George N. Shuster Professor of Philosophy

Aldo Tagliabue, Assistant Professor of Classics

## EARLY CHRISTIAN STUDIES

### Chairs:

Luca Grillo (Classics)

Timothy Matovina (Theology)

### Director of Graduate Studies:

Hildegund Müller (Classics)

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Fax: (574) 631-2153

Location: 304 O'Shaughnessy

Email: [classics@nd.edu](mailto:classics@nd.edu)

Web: <http://classics.nd.edu>

## The Master of Arts

Degree Requirements	
GPA	42 credits
Credits	
Total Credits	42 credits
Other	Admission to candidacy
	Foreign language requirement
	Preparation of reading list
	Candidacy examinations and/or a written thesis

The two-year interdisciplinary M.A. program in early Christian studies is sponsored jointly by the departments of classics and theology, with the participation of faculty in several other departments. It offers beginning graduate students basic training designed to help them gain success in the best doctoral programs in theology, religious studies, classics, history, art history, and literary studies. In addition to providing various opportunities for those already proficient in language study, it also offers basic training in the multiple fields of early Christian studies.

Students are expected to finish 42 credits of coursework to complete the program. Each student develops a curriculum to meet individual needs in consultation with the director of graduate studies and other faculty advisors. But all curricula are designed to ensure that students are equipped with the necessary language skills (at least two ancient Christian languages and literatures [Latin and/or Greek and/or Syriac, etc.] and one or more contemporary research languages) and with a sturdy grasp of the intellectual, historical, and social contexts of the early church and the methods and resources for studying them.

New disciplinary and critical approaches to late antiquity, as well as a

growing awareness of the importance of Christian origins for the present life of the churches, have made early Christian studies a vibrant and rapidly expanding field. Traditional expertise in philology, history, and theology remains fundamental, but these skills must now be supplemented by a broad range of interdisciplinary approaches. An unusually strong faculty presence makes Notre Dame the ideal place for pursuing this area. Students who come with a keen interest in the field, but limited formal training in it, may acquire the basic skills and knowledge necessary for advanced study. Those already adequately prepared in the basics can broaden their competency by studying the language and culture of Middle Eastern, Egyptian, and Byzantine Christianity, and of rabbinic Judaism and early Islam.

## Tenured and Tenure-Track Faculty

Khaled Anatolios, The John A. O'Brien Professor of Theology

Christopher Baron, Associate Professor of Classics

W. Martin Bloomer, Professor of Classics

John C. Cavadini, Professor of Theology, and Executive Director of the Institute for Church Life

Brian E. Daley, S.J., The Catherine F. Huisking Professor of Theology

Nathan Eubank, Associate Professor of Theology

John T. Fitzgerald, Professor of New Testament and Early Christianity

Nina Glibetić, Assistant Professor of Theology

Robin M. Jensen, The Patrick O'Brien Professor of Theology

Maxwell E. Johnson, Professor of  
Theology

Mary M. Keys, Associate Professor of  
Political Science

Brian Krostenko, Associate Professor  
of Classics

Blake Leyerle, The John Cardinal  
O'Hara, C.S.C., Associate Profes-  
sor of Theology, and Concurrent  
Associate Professor of Classics

David Lincicum, The Rev. John A.  
O'Brien Associate Professor of  
Theology

John P. Meier, The William K. Warren  
Professor of Catholic Theology,  
Emeritus

Hildegund Müller, Associate Profes-  
sor of Classics, and Director of  
Graduate Studies

David K. O'Connor, Professor of  
Philosophy and Concurrent Pro-  
fessor of Classics

Cyril O'Regan, The Catherine F. Huis-  
king Professor of Theology

Gretchen J. Reydam-Schils, Professor  
in the Program of Liberal Stud-  
ies and Concurrent Professor of  
Classics

Aldo Tagliabue, Assistant Professor of  
Classics

Alexis Torrance, The Archbishop  
Demetrios Assistant Professor of  
Byzantine Theology

## Associated Faculty

Adam Bremer-McCollum, Visiting  
Associate Special Professional  
Faculty, Theology

## ENGLISH

### Chair:

Jesse M. Lander

### Director of Graduate Studies:

Kate Marshall

### Director of Creative Writing:

Azareen Van der Vliet Oloomi

### English

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Web: <http://english.nd.edu>

### Creative Writing

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Location: 340 O'Shaughnessy

E-mail: [creativewriting@nd.edu](mailto:creativewriting@nd.edu)

Web: <http://creative-writing.nd.edu>

## The Master of Arts: English and American Literature

Degree Requirements	
GPA Credits	30–33 credits
Total Credits	33 credits (non-research) 36 credits (research)
Other	Admission to candidacy
	Foreign language requirement
	Written examination or thesis

The master of arts (M.A.) program is designed chiefly to prepare students for advanced humanistic work in and beyond the academy.

There are two options for the M.A. degree: non-research or research. For the non-research M.A., students must take at least 11 literature courses (33 credit

hours) and one exam-reading course for the non-research degree. For the research M.A., students are required to take at least 10 literature courses (30 credit hours) and 6 credit hours of thesis research.

## The Master of Arts: English and Law

Degree Requirements	
GPA Credits	21 credits of English 9 credits of Law
Total Credits	30 credits (non-research) 36 credits (research)
Other	Admission to candidacy
	Written thesis (research)

This is a program open only to students already admitted to the Notre Dame Law School who also wish to obtain a master of arts degree in English. A student takes 21 hours of English courses and 9 hours of law courses. Normally, students pursue the non-research degree; those wishing to complete the research degree need to complete an additional six hours of thesis research. Current or matriculated NDLS students apply directly to the English Department.

## The Master of Fine Arts: Creative Writing

Degree Requirements	
GPA Credits	24 credits
Total Credits	36 credits
Other	Admission to candidacy
	Master's thesis

The graduate creative writing program is a four-semester program in which



## ENGLISH

students take 36 credit hours of writing workshops, thesis preparation tutorials, and literature classes. Students may also choose to work as editorial assistants on our national literary magazine, *The Notre Dame Review*, and the international press, Action Books.

Throughout the four semesters, all students work closely with an advisor on the thesis, which will ultimately be a publishable novel, collection of stories, volume of poetry, or work of literary nonfiction.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	42 credits
Total Credits	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The Ph.D. program requires 42 credit hours of coursework. Students must take the Introduction to Graduate Study, a historical distribution of courses, and at least one course in literary theory. In keeping with its policy of encouraging interdisciplinary study, the program permits the student to take up to 12 credit hours of coursework in a field other than English.

### Foreign Language Requirement

By the end of the second year of full-time residency, the student must demonstrate proficiency in two languages or fluency in one language. Proficiency is demonstrated by successfully passing a language exam administered by the appropriate language department, or by passing an advanced

undergraduate literature course in the language. Fluency is demonstrated by passing a graduate literature course in the language. The language(s) should be appropriate to the student's area of research.

### Candidacy (Comprehensive Three-Field) Examinations

The student takes examinations in one historical period selected from among Old English, Middle English, Renaissance, Restoration and 18th-century, 19th-century British, 20th-century British, early American literature (to 1865), middle American literature from the Civil War to 1930, and post-1930 American literature. The student takes examinations, both oral and written, in one historical period by the end of their fifth semester in the program.

### Dissertation Proposal

By the end of their sixth semester, students produce a dissertation prospectus and preliminary draft of one part of the dissertation (a chapter or substantial part of a chapter). Students then meet with the dissertation committee for advice on continuing and completing the project.

## Tenured and Tenure-Track Faculty

Christopher Abram, Professor

James M. Collins, Professor of Film, Television, and Theatre and Concurrent Professor of English

Nan Da, Assistant Professor

Margaret Doody, Professor Emerita

John Duffy, Professor of English and Director, University Writing Center and College Seminar Program

Stephen M. Fallon, Cavanaugh Professor of Humanities and Professor of English

Christopher Fox, Professor Emeritus

Stephen A. Fredman, Professor Emeritus

Johannes Göransson, Associate Professor

Barbara J. Green, Associate Professor

Sandra Gustafson, Professor

Susan Cannon Harris, Professor

Peter Holland, McMeel Professor in Shakespeare Studies in the Department of Film, Television and Theatre, and Concurrent Professor in English

Romana Huk, Associate Professor

Cyraina Johnson-Roullier, Associate Professor

Essaka Joshua, Associate Professor

Michelle Karnes, Associate Professor

Kathryn Kerby-Fulton, Notre Dame Professor Emerita

Declan Kiberd, Professor Emeritus

Laura Knoppers, George N. Shuster Professor of English Literature

Greg P. Kucich, Professor

Jesse M. Lander, Chair and Associate Professor

Jose Limon, Notre Dame Professor of American Literature, Emeritus

Sara Maurer, Associate Professor

Tim Machan, Mary Lee Duda Professor of Literature

Sara Marcus, Assistant Professor

Kate Marshall, Associate Professor and Director of Graduate Studies

Barry McCrea, Donald R. Keough  
Professor of Irish Studies

Joyelle McSweeney, Professor

Orlando Menes, Professor

Susannah Monta, Associate Professor

Ernest Morrell, Coyle Professor in  
Literacy Education

Ian Newman, Assistant Professor

William A. O'Rourke, Professor  
Emeritus

Sarah Quesada, Assistant Professor

Francisco Robles, Assistant Professor

Mark Sanders, Professor

Valerie Sayers, William R. Kenan Jr.  
Professor of English

Roy Scranton, Associate Professor

John Sitter, Professor Emeritus

Yasmin Solomonescu, Associate Profes-  
sor

David Wayne Thomas, Associate  
Professor

Steve Tomasula, Professor

Azareen Van der Vliet Oloomi, As-  
sistant Professor and Director of  
Graduate Studies (Creative Writ-  
ing)

Chris R. Vanden Bossche, Professor  
Emeritus

Elliott Visconsi, Associate Professor,  
Concurrent Associate Professor of  
Law, and Chief Academic Digital  
Officer

Laura Dassow Walls, William P. and  
Hazel B. White Professor of  
English

Henry Weinfeld, Professor of Liberal  
Studies and Concurrent Professor  
of English

## HISTORY

### Chair:

Jon T. Coleman

### Director of Graduate Studies:

Darren Dochuk

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Web: <http://history.nd.edu>

The graduate program in history ac-  
cepts only students planning to pursue  
the Ph.D. degree. Before completing  
their doctorates, students must satisfy  
the departmental requirements for the  
master's degree.

See the program handbook for specific  
details regarding coursework and lan-  
guage requirements in each field.

## The Master of Arts

Degree Requirements	
GPA	24 credits
Credits	
Total Credits	36 credits
Other	Foreign language requirement
	Qualifying examinations
	Oral examinations
	Teaching or research assistant service

Students may receive a master of arts  
after completing 36 credit hours of  
study, including one graduate-level  
seminar in history and 24 credit hours  
of graduate-level work (seminars, col-  
loquia, directed readings, supplemental  
research, and readings) in history or  
related disciplines. The master's degree

demands satisfactory completion of  
coursework with a GPA of no less than  
3.0, and students must demonstrate  
a reading knowledge of one modern  
foreign language by the end of their  
third semester in residence.

Students will normally receive their  
master's degree upon successful  
completion of their Ph.D. candidacy  
examinations.

## Master's Examinations

The master's examination is normally  
the equivalent of two qualifying exam  
fields in the normal format—a written  
examination in each field, followed by  
an oral exam. There must be a gap of  
at least five working days between the  
final written exam and the oral exam.

Students who fail a candidacy exami-  
nation may appeal to the director of  
graduate studies to retake the failed  
portion one time. A terminal master's  
degree may be awarded in cases where  
a student has completed all course-  
work, passed at least one language  
exam, and passed a master's examina-  
tion.

Students entering Notre Dame with a  
master's degree in history from another  
institution normally have the same  
coursework, writing, and examination  
requirements as those entering with-  
out such a degree. Normally, no more  
than three credits may be transferred  
and used to replace required courses in  
history.

See the program handbook for specific  
details on the coursework and lan-  
guage requirements of each field.

## HISTORY

**The Doctor of Philosophy**

Degree Requirements	
GPA Credits	36 credits
Total Credits	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

To receive a Ph.D., a student must complete a total of 36 letter-graded credit hours of study, including at least two graduate-level seminars.

In addition to completing prescribed coursework, doctoral students must also pass Ph.D. candidacy examinations in their specialties, normally taken in the student's third year of residence. Students wishing to take candidacy examinations earlier than the third year of residence may do so with the consent of their academic advisors and the director of graduate studies.

Before advancing to Ph.D. candidacy, students must submit to the department an approved dissertation proposal (see procedures outlined in the program handbook). Within eight years of enrollment into the history graduate program, students must complete a satisfactory doctoral dissertation or risk the loss of their candidacy status.

**Tenured and Tenure-Track Faculty**

R. Scott Appleby, Dean of the Keough School of Global Affairs and Professor

Edward N. Beatty, Associate Dean of Academic Affairs, Keough School

of Global Affairs; Professor of History; and Faculty Fellow, Kellogg Institute for International Affairs

Gail Bederman, Associate Professor

Alexander Beihammer, Associate Professor

Liang Cai, Assistant Professor

Mariana Candido, Associate Professor

Katlyn Carter, Assistant Professor and Faculty Fellow, ND Institute of Advanced Study

Jon T. Coleman, Department Chair and Professor

Kathleen Cummings, Associate Professor

John Deak, Associate Professor

Darren Dochuk, Director of Graduate Studies and Associate Professor

Felipe Fernández-Armesto, William P. Reynolds Professor

Karen Graubart, Associate Professor

Brad S. Gregory, Dorothy Griffin Professor, and Director, ND Institute for Advanced Study

Patrick Griffin, Madden Hennebry Professor

Christopher S. Hamlin, Professor

Daniel Hobbins, Associate Professor

Katie Jarvis, Assistant Professor

Ian Johnson, Assistant Professor

Asher Kaufman, Associate Professor

Elisabeth Köll, Associate Professor

Thomas A. Kselman, Professor

Semion Lyandres, Professor

Alexander M. Martin, Professor

John T. McGreevy, Professor

Rebecca Tinio McKenna, Assistant Professor

Nikhil Menon, Assistant Professor

Margaret Meserve, Associate Dean for the Humanities and Faculty Affairs, and Associate Professor

Rev. Wilson D. Miscamble, C.S.C., Professor

Dian Hechtner Murray, Professor Emerita

Thomas F. X. Noble, Professor Emeritus

Mark Noll, Professor Emeritus

Paul Ocobock, Associate Professor

Jaime Pensado, Associate Professor

Richard B. Pierce, Associate Professor

Linda Przybyszewski, Associate Professor

Evan Ragland, Assistant Professor

Rory Rapple, Associate Professor

Emily Remus, Assistant Professor

Sarah Shortall, Assistant Professor

James Smyth, Professor

Joshua Specht, Assistant Professor

Robert E. Sullivan, Professor

Julia Adeney Thomas, Associate Professor

Deborah Tor, Associate Professor

James Turner, Professor Emeritus

Thomas A. Tweed, Professor of History, and Welch Professor of American Studies

John H. Van Engen, Professor Emeritus

## HISTORY AND PHILOSOPHY OF SCIENCE

### Program Director and Director of Graduate Studies:

Robert D. Goulding

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E-mail: [reilly@nd.edu](mailto:reilly@nd.edu)

Web: <http://reilly.nd.edu/hps/>

HPS at Notre Dame is an interdepartmental program. Because the Ph.D. in HPS incorporates the requirements for a doctorate in a standard disciplinary department, either history, philosophy, or theology, the HPS degree program leads to a doctoral degree inclusive of, but broader in scope than, the departmental degree. Students who take the doctoral degree in the HPS program can claim to have satisfied both the disciplinary degree requirements and also those of an HPS degree. This allows Notre Dame graduates to situate their work within traditional disciplinary contexts and enables them to qualify for academic positions in regular disciplinary departments.

### The Master of Arts

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Research paper or master's thesis (terminal M.A. only)

The master of arts is not a terminal degree, although individuals concurrently enrolled in other doctoral graduate programs of the University may seek to earn a non-research HPS master's degree in order to complement their doctoral studies. Students whose primary enrollment is in HPS will be entitled to receive a master's degree once they have completed the written and oral examination for Ph.D. candidacy.

### The Non-Research M.A.

The non-research HPS M.A. degree requires the completion of 30 credit hours of coursework. At least three courses in history of science and at least three courses in philosophy of science (three of which must be chosen from the program's core courses) form the core of this requirement. The student, in consultation with the HPS program director, selects the remaining courses. To be eligible for HPS credit, these courses must bear in significant ways on the concerns of history and philosophy of science. Students taking the non-research HPS M.A. concurrently with a Ph.D. in another Notre Dame program may count up to nine hours of coursework toward both degree programs, subject to approval by the director of HPS and the director of graduate studies in the other program.

Reading knowledge in one foreign language is required.

A one-hour oral examination, based on coursework, completes the requirements for the non-research M.A. degree.

### The Research M.A.

In the event that an admitted HPS student decides to leave the program or is subsequently discontinued by the HPS program or the disciplinary department, the student may pursue a research (or thesis) terminal M.A. degree. The student must have completed

30 hours of coursework, including at least three courses in history of science and three in philosophy of science. The student should have demonstrated reading knowledge of one foreign language.

Students taking the terminal HPS research M.A. will prepare an extended research paper or formal M.A. thesis under the direction of a faculty member, for which six hours of thesis credit will be awarded, which may be used to satisfy the coursework requirement. A one-hour oral comprehensive examination completes the requirements for this research M.A. degree.

### The Doctor of Philosophy

Degree Requirements	
GPA Credits	45 credits (42 credits for theology and science track)
Total Credits	62 credits
Other	Foreign language requirement and/or approved technical proficiency
	Candidacy examinations
	Doctoral dissertation

HPS students pursue the Ph.D. degree in one of three tracks: the history track, the philosophy track, and the theology and science track. Students on all three tracks must undergo a review at the end of their second year, in order to be admitted to the third year of the program. Students who fail to pass that review will normally be awarded an M.A. in HPS. Full details of the review are in the program handbook.

### History Track

Those who elect the history track toward the Ph.D. in history and philosophy of science must satisfy a required



course distribution as defined by the program. For specific course requirements, consult the program handbook.

The basic language requirement for Ph.D. candidates on the history track is a reading knowledge of two foreign languages relevant to the student's research, whether ancient or modern. With the permission of the student's advisor and the program director, one language competence may be replaced by proficiency in a technical discipline bearing on the student's research work, such as one of the natural sciences.

In the spring of the second year, the student will prepare for the Ph.D. candidacy examination. All three fields must be completed by the end of the fall semester of their third year. They do not necessarily have to be taken at the same time.

Full details of the history track requirements are laid out in the program handbook.

### Philosophy Track

Those who elect the philosophy track toward the Ph.D. in history and philosophy of science must satisfy a required course distribution as defined by the program. For specific course requirements, consult the program handbook.

The language requirement for Ph.D. candidates in the philosophy track is a reading knowledge of two foreign languages. With the permission of the student's advisor and the program director, both language competences may be replaced by proficiency in a technical discipline bearing on the student's research work, such as one of the natural sciences.

Directly after fall break in the student's third year, the student must submit two qualifying papers. By the end of the spring semester of the same year, the student will take an oral qualifying

examination in the philosophy of science, with a special focus on the problem area in which he or she intends to write a dissertation.

Full details of the philosophy track requirements are laid out in the program handbook.

### Theology and Science Track

Those who elect the theology and science track toward the Ph.D. in history and philosophy of science must satisfy a required course distribution as defined by the program. For specific course requirements, consult the program handbook.

Ph.D. candidates on the theology and science track fulfill the foreign language requirements required by the Theology Department.

The written and oral candidacy examinations are usually taken in the sixth semester of the program. Successful completion of the written examinations is required for admission to the oral examination.

Full details of theology track requirements are laid out in the program handbook.

### Dissertation Proposal

Once Ph.D. candidacy requirements have been completed, the student will begin preparation of a dissertation proposal under the guidance of a research director of his or her choice. The HPS program requires that the proposal defense to occur earlier than the typical Graduate School deadline of the end of the eighth semester; refer to the program handbook for details specific to each track.

## Tenured and Tenure-Track Faculty

J. Matthew Ashley, Associate Professor of Theology

Feraz Azhar, Assistant Professor of Theology

Francesca Bordogna, Associate Professor in the Program of Liberal Studies

Jon Coleman, Professor and Chair of History

Tarek Dika, Assistant Professor in the Program of Liberal Studies

Celia Deane-Drummond, Professor of Theology

Christopher Fox, Professor Emeritus

Robert D. Goulding, Director of the History and Philosophy of Science program and Associate Professor in the Program of Liberal Studies

Christopher S. Hamlin, Professor of History

Don A. Howard, Professor of Philosophy

Ian Johnson, Assistant Professor of History

Michelle Karnes, Associate Professor of English

Janet Kourany, Associate Professor of Philosophy

Katharina Kraus, Assistant Professor of Philosophy

Kate Marshall, Assistant Professor of English

Philip E. Mirowski, the Carl E. Koch Professor of Economics and Policy Studies and the History and Philosophy of Science

Evan Ragland, Assistant Professor of History

Hannah Rubin, Assistant Professor of Philosophy

Thomas A. Stapleford, Associate Professor and Chair in the Program of Liberal Studies

Nicholas Teh, Assistant Professor of Philosophy

Laura Dassow Walls, William P. and Hazel B. White Professor of English

## Associated Faculty

Anna Geltzer, Assistant Director of the History and Philosophy of Science program

Jay Malone, Executive Director of the History of Science Society

## ITALIAN

### Chair:

Alison Rice

### Director of Graduate Studies:

Zygmunt G. Barański

Telephone: (574) 631-6887

Fax: (574) 631-3493

Location: 343 O'Shaughnessy

E-mail: [romlang@nd.edu](mailto:romlang@nd.edu)

Web: <http://romancelanguages.nd.edu/>

## The Doctor of Philosophy

Degree Requirements	
GPA	51 credits
Credits	
Total Credits	60 credits
Other	Admission to candidacy

Degree Requirements	
	Foreign language requirement
	Candidacy examination
	Doctoral dissertation

The Ph.D. in Italian is a highly selective program that teaches and trains students working in the field of Italian Studies. The program offers a flexible curriculum tailored to each student's interests and background that leads to a new dissertation-oriented program of study designed to achieve both a high degree of specialization and a broad understanding of Italian literature and culture. Although students in the Ph.D. in Italian mainly work on Italian questions, they enrich their area of specialization by following three courses in a single field allied to their primary research interests, such as history, film studies, cultural anthropology, medieval studies, philosophy, theology, Romance philology, critical theory, art history, etc. In addition, students attend the Italian Seminar, which functions as a 'core course' for the degree; the 'language pedagogy' course; and a course on literary and/or critical theory.

At least 60 credit hours, or a minimum of 30 credit hours beyond a previously awarded master's degree, are required for the Ph.D. These credit hours are earned through a combination of coursework and/or research.

For additional coursework requirements, consult the program's handbook.

## Tenured and Tenure-Track Faculty

Zygmunt G. Barański, Notre Dame Professor of Dante and Italian Studies, and Director of Graduate Studies

Theodore J. Cachey Jr., Professor of Italian, and Albert J. Ravarino Family Director of Dante and Italian Studies

Sabrina Ferri, Associate Professor of Italian

Charles L. Leavitt IV, Assistant Professor of Italian Studies

Christian Moevs, Associate Professor of Italian

## MEDIEVAL STUDIES

### Director:

Thomas E. Burman

### Director of Graduate Studies:

Claire Taylor Jones

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Fax: (574) 631-8644

Location: 715 Hesburgh Library

E-mail: [medinst@nd.edu](mailto:medinst@nd.edu)

Web: <http://medieval.nd.edu>

The Medieval Institute admits students to a doctor of philosophy degree in medieval studies. After two years of coursework, and completion of examinations in the third year, students earn a master of medieval studies (MMS) degree and may be approved for further work towards the Ph.D. The Institute does not accept candidates for a terminal master's degree.

## The Master of Medieval Studies

Degree Requirements	
GPA	39 credits
Credits	

Degree Requirements	
Total Credits	42 credits
Other	Admission to candidacy
	Medieval research language requirement

### Language Requirements

The programs of the Medieval Institute are rigorous and interdisciplinary, and make high demands in terms of language skills.

Each student must pass a written exam in her/his primary medieval research language (Latin, Greek, or Arabic) before the end of the second year of study. This exam must be passed by the end of the fourth semester in order for a student to continue in the program.

A student should plan to take the exam in his/her medieval research language every semester until it is passed.

Students must pass written exams in two modern languages by the end of the fifth semester.

### Coursework

Consult the *Medieval Institute Graduate Handbook* relevant to your year of matriculation for specific program details regarding course and credit requirements, electives and academic milestones.

Students who enter the program with a completed M.A. degree may petition the DGS to transfer up to two courses (six credits) from their M.A. program. Transferring credits allows more flexibility in our program and can slightly accelerate a student's progress.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	48 credits
Total Credits	70 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The Ph.D. requires satisfactory completion of the master of medieval studies outlined above, successful completion of four written Ph.D. candidacy examinations, one oral Ph.D. candidacy examination, presentation of a dissertation proposal, and the presentation and defense of a satisfactory dissertation.

In early May each year the director and the graduate committee will review the accomplishments of the members of the third-year class. There are two possible recommendations.

1. Continuation (if the proposal is already approved) or permission to continue preparation of the dissertation proposal, with the expectation of approval by the start of the fall semester
2. Termination with only an MMS degree (this decision would reflect failure of the exams or an inability to make reasonable progress toward a proposal)

A first draft of the dissertation proposal must be submitted to the entire anticipated committee by the last week of classes in the fifth semester (normally fall semester of year three). The final proposal must be submitted to the entire anticipated committee in the first week of classes of the following semester (normally spring semester). Proposals will be discussed in a 60- to

90-minute session, to be scheduled no later than two weeks after the proposal has been submitted to the committee. At the end of the meeting, the committee will vote to pass, fail, or defer the candidate's proposal. If the proposal passes, the student is declared ABD and may proceed to dissertating. If the proposal fails, the student will be terminated from the program at the end of the academic year. In the event of a deferral, students have until the Friday before finals week (or, for students entering fall 2021 and after, two weeks from the date of the proposal defense) to submit a satisfactorily revised proposal. After acceptance of the dissertation proposal, most students will require 2.5 to 3.5 years to complete the dissertation. It is not unusual for a satisfactory student to take six years, from start to finish, to achieve the doctorate in Medieval Studies.

See the program handbook for additional details on the program's dissertation proposal and defense requirements.

### Associated Tenured and Tenure-Track Faculty

Hussein Abdulsater, Assistant Professor of Classics

Chris Abram, Professor of English

Khaled Anatolios, John A. O'Brien Professor of Theology

Ann Astell, Professor of Theology

Yury Avvakumov, Associate Professor of Theology and History of Christianity

Zygmunt G. Barański, Notre Dame Professor of Dante and Italian Studies

Alexander Beihammer, Professor of History and Heiden College Chair

W. Martin Bloomer, Professor of Classics	Daniel Hobbins, Associate Professor of History	Hildegund Müller, Associate Professor of Classics
Jeremy Phillip Brown, Assistant Professor of Theology	Peter Holland, Associate Dean for the Arts; McMeel Family Professor in Shakespeare Studies in the Department of Film, Television, and Theatre; and Concurrent Professor of English	Amy C. Mulligan, Assistant Professor of Irish Language and Literature
Katie Bugyis, Assistant Professor, Program of Liberal Studies		Andrew Radde-Gallwitz, Associate Professor, Program of Liberal Studies
Thomas E. Burman, Professor of History and Robert M. Conway Director of the Medieval Institute	Peter Jeffrey, Michael P. Grace Chair in Medieval Studies, Professor of Musicology and Ethnomusicology	Gabriel Radle, Assistant Professor of Theology
Theodore J. Cachey Jr., Professor of Italian and Ravarino Family Director of Dante and Italian Studies	Rev. John I. Jenkins, C.S.C., President of the University and Professor of Philosophy	Rory Rapple, Associate Professor of History
Therese Cory, John and Jean Oesterle Associate Professor of Thomistic Studies	Robert M. Jensen, Professor of Theology	Gretchen Reydams-Schils, Professor, Program of Liberal Studies
Rev. Brian Daley, S.J., the Catherine F. Huisiking Professor of Theology	Claire Taylor Jones, Associate Professor of German, William Payden College Chair, and Director of Graduate Studies, Medieval Institute	Gabriel Said Reynolds, Professor of Islamic Studies and Theology
JoAnn DellaNeva, Professor of French Language and Literature	Encarnación Juárez-Almendros, Associate Professor of Spanish Language and Literature	Denis Robichaud, Associate Professor in the Program of Liberal Studies
Tarek Dika, Assistant Professor in the Program of Liberal Studies		Deborah Tor, Associate Professor of History
Stephen D. Dumont, Professor of Philosophy	Michelle Karnes, Associate Professor of English	Alexis Torrance, Associate Professor; Archbishop Demetrios College Chair of Byzantine Theology
Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy	Kathryn Kerby-Fulton, Professor Emerita of English	John Van Engen, Andrew V. Tackes Professor Emeritus of Medieval History
Felipe Fernández-Armesto, William P. Reynolds Professor of History	Tim William Machan, Professor of English	Joseph Wawrykow, Professor of Theology
Nina Glibetic, Assistant Professor of Theology	Julia Marvin, Associate Professor in the Program of Liberal Studies	
Robert Goulding, Associate Professor in the Program of Liberal Studies; Director of the History and Philosophy of Science Program	William C. Mattison III, Associate Professor of Theology	
Karen B. Graubart, Associate Professor of History	Peter McQuillan, Associate Professor of Irish Language and Literature	
David T. Gura, Curator of Ancient and Medieval Manuscripts, Hesburgh Library; Concurrent Associate Professor in the Medieval Institute	Margaret H. Meserve, Associate Professor of History; Fabiano College Chair in Italian Studies; and Associate Dean, College of Arts and Letters	
	Christian R. Moevs, Associate Professor of Italian	

## PHILOSOPHY

**Chair:**  
Jeff Speaks

**Director of Graduate Studies:**  
Curtis Franks

Telephone: (574) 631-6471

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Location: 100 Malloy Hall

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Web: <http://philosophy.nd.edu>



## The Master of Arts

Degree Requirements	
GPA Credits	27 credits
Total Credits	30 credits
Other	Admission to candidacy
	Candidacy examination

Students are admitted to the doctoral program in the philosophy program, but may receive a non-research M.A. upon successful completion of the written Ph.D. candidacy examination (history exam) and 27 credit hours of graduate coursework.

The faculty as a whole periodically evaluates the progress of all students. Evaluations focus on students' performance in courses, in non-course requirements, and in their roles as teaching assistants and teachers. If the faculty judge at any stage that a student's progress is unsatisfactory, the student may be required to terminate his or her graduate studies.

A student who does not receive permission to proceed to doctoral candidacy upon evaluation may receive a non-research M.A. degree in philosophy after finishing 27 credit hours of graduate coursework and passing a special M.A. oral candidacy examination.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	42 credits
Total Credits	60 credits
Other	Admission to candidacy
	Foreign language requirement

Degree Requirements	
	Qualifying papers
	Candidacy examinations
	Doctoral dissertation

For the doctorate a student must complete 42 credit hours of graduate coursework. Students who enter the doctoral program with an M.A. are normally excused from 6 to 12 credit hours of graduate coursework. Any philosophy graduate student is permitted to take up to 6 credit hours of approved undergraduate coursework in philosophy and up to 6 credit hours of coursework in related fields to satisfy the 42 credit hours. Those who choose to concentrate in such specialized fields as logic and philosophy of science may be required to take courses in other departments in support of their specialization. Students are expected to maintain a minimum B average in all of their coursework.

In general, course requirements should be satisfied within the first two years, and must be satisfied within the first three years. For specific course and seminar requirements, see the program handbook.

### Candidacy Examination

At the end of the summer following the first year of coursework, students are required to take a written exam in the history of philosophy. The exam is given in two parts, with three hours covering ancient and medieval philosophy, and three hours covering modern philosophy.

Early in the third year, the student and his or her chosen advisor begin work on a program of independent reading in preparation for the oral comprehensive examination. This examination must be taken before the end of the sixth semester. See the program handbook for an updated list of areas

of concentration available for examination and subsequent dissertation research.

This history examination and the oral comprehensive examination constitute the candidacy examination for the Ph.D.

### Qualifying Papers

Students are required to submit two qualifying papers, each evaluated by a faculty member chosen by the students with the approval of the DGS. The two papers must be evaluated by different faculty members. This requirement must be satisfied by the midpoint of the student's fourth semester.

### Language Requirements

Most students will require expertise in a foreign language, typically at least one of French, German, Greek, or Latin, in order to complete their research and to have the capacity for further scholarly work in their field. The dissertation director and director of graduate studies will determine in each case the level of expertise required, and the student will not be permitted to defend the dissertation until demonstrating that level of expertise. One way of demonstrating sufficient expertise is by passage of the departmental translation exam by the end of the semester after the semester in which the dissertation proposal is approved. In individual cases, passage of the exam prior to approval of the dissertation proposal may be required.

### Dissertation Proposal and Completion

A dissertation proposal must be approved by the student's proposal committee by the end of the seventh semester. Once the dissertation proposal is approved, a meeting is scheduled for the student and the committee in order for the committee to provide

guidance concerning the research and writing of the dissertation.

## Tenured and Tenure-Track Faculty

Robert Audi, John A. O'Brien Professor of Philosophy

Feraz Azhar, Assistant Professor

Timothy Bays, Associate Professor

Jc Beall, O'Neill Family Professor

Sara Bernstein, Thomas J. and Robert T. Rolfs Collegiate Chair of Philosophy and Associate Professor

Patricia A. Blanchette, McMahan-Hank Professor

Laura Callahan, Assistant Professor

Therese Cory, John and Jean Oesterle College Chair and Associate Professor

Richard Cross, Rev. John A. O'Brien Professor of Philosophy

Brian Cutter, Assistant Professor

Stephen D. Dumont, Professor

Thomas P. Flint, Professor

Curtis Franks, Director of Graduate Studies and Associate Professor

Don A. Howard, Professor

Rev. John I. Jenkins, C.S.C., President of the University and Professor

Sean Kelsey, Rev. John A. O'Brien Associate Professor

Janet Kourany, Associate Professor

Katharina Kraus, Assistant Professor

Kris McDaniel, Professor

Samuel Newlands, William J. and Dorothy K. O'Neill Collegiate Professor

Daniel Nolan, McMahan-Hank Professor of Philosophy

John O'Callaghan, Associate Professor

David K. O'Connor, Professor

Michael C. Rea, Rev. John A. O'Brien Professor

Blake Roeber, Associate Professor

Hannah Rubin, Assistant Professor

Fred Rush, Professor

Joshua Seachris, Assistant Teaching Professor

Christopher Shields, George N. Shuster Professor of Philosophy

Jeff Speaks, Chair and Professor

James P. Sterba, Professor

Meghan Sullivan, Rev. John A. O'Brien Professor and Director of Notre Dame Institute of Advanced Study

Nicholas Teh, Associate Professor

Ted A. Warfield, Professor

Stephen H. Watson, Professor

Paul J. Weithman, Glynn Family Honors Professor of Philosophy

Mike Zhao, Assistant Professor

## Associated Faculty

Shane Duarte, Assistant Professor of the Practice

Alexander Jech, Associate Professor of the Practice

## ROMANCE LANGUAGES AND LITERATURES

### Chair:

Alison Rice

### Director of Graduate Studies:

Joshua Lund

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Location: 343 O'Shaughnessy

E-mail: [romlang@nd.edu](mailto:romlang@nd.edu)

Web: <http://romancelanguages.nd.edu/>

## The Master of Arts

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Admission to candidacy
	Qualifying examination
	Foreign language requirement
	Candidacy examination
	Master's thesis (Italian studies only)

The program in romance languages and literatures offers master of arts degrees French, Italian studies, and Spanish. Each student is encouraged to work closely with his/her advisor to design a course of study to suit individual needs, interests, and future goals.

All candidates for an advanced degree are expected to take a minimum of 30 credit hours of courses in their field of specialization. See the program handbook for additional details on course requirements.

During the second semester of the first year of graduate study, students in French must pass an oral qualifying examination. The master's candidate will choose from a selection of texts and must demonstrate competency in analyzing a literary text in the target language before the graduate faculty. At this time, faculty members will discuss and evaluate the student's performance in the master's program.

In addition, all students must demonstrate competency in a second foreign language by passing a reading exam or through successful completion of appropriate coursework. Students in French and Spanish take a comprehensive written examination at the end of the second year. Additional details on the comprehensive examinations are available in the program handbook.

Students in Italian complete a master's thesis at the end of the second year.

Students have the opportunity to teach several language courses before completion of the master's degree. A preliminary workshop, "Methods of Foreign Language Teaching" and "Practicum in Teaching" are required of all graduate teaching assistants.

### Combined B.A./M.A. Program

The Department of Romance Languages and Literatures offers its majors in French and Spanish the opportunity to participate in its graduate program through a combination B.A./M.A. degree in the language of their major. This program requires students to complete a first major in a chosen language (i.e., at least 30 hours of coursework) during the normal four-year undergraduate period, followed by a total of 30 credit hours of graduate courses taken during the fourth and fifth years in residence. Six credit hours will be counted toward both the undergraduate and the graduate degrees. During their senior year, participants

in this program complete two graduate courses, take the qualifying exam given to all first-year graduate students, and apply to the Graduate School for admission during the spring semester. B.A./M.A. students are eligible for a teaching fellowship during their fifth year that includes a tuition waiver and a generous teaching stipend. Well-qualified students who are interested in this program should contact the director of graduate studies or the graduate coordinator in their chosen language at the beginning of their junior year.

### Tenured and Tenure-Track Faculty

Thomas F. Anderson, Professor of Spanish

Pedro Aguilera-Mellado, Assistant Professor of Modern Spain

Zygmunt G. Barański, Notre Dame Professor of Dante and Italian Studies; Director of Graduate Studies, Italian

Theodore J. Cachey, Professor of Italian and the Albert J. and Helen M. Ravarino Family Director of Dante and Italian Studies

JoAnn DellaNeva, Professor of French; Academic Director and London Global Gateway

Sabrina Ferri, Associate Professor of Italian

Karen Graubart, Concurrent Associate Professor of History and Romance Languages and Literatures

Rev. Gregory Haake, C.S.C., Assistant Professor of French

Ben Heller, Associate Professor of Spanish

Carlos Jáuregui, Associate Professor of Spanish

Charles L. Leavitt IV, Assistant Professor of Italian Studies

Joshua Lund, Professor of Spanish; Director of Graduate Studies, Spanish and French

Louis MacKenzie, Associate Professor of French

Barry McCrea, Concurrent Professor of Irish Language and Literature and Romance Languages and Literatures

Vanesa Miseres, Assistant Professor of Spanish

Christian Moevs, Associate Professor of Italian

Olivier Morel, Assistant Professor and Romance Languages and Literatures and Film, Television and Theatre

Marisel Moreno, Associate Professor of Spanish

María Rosa Olivera-Williams, Professor of Spanish

Sarah Quesada, Concurrent Assistant Professor and Department of English

Alison Rice, Department Chair and Associate Professor of French; Director and Institute for Scholarship in the Liberal Arts

Denis Robichaud, Concurrent Assistant Professor and Program of Liberal Studies and Romance Languages and Literatures

Sonja Stojanovic, Assistant Professor of French

Alain Toumayan, Professor of French

Juan Vitulli, Associate Professor of Spanish

## SACRED MUSIC

## SACRED MUSIC

### Program Director:

Margot Fassler

### Acting Director of Graduate Studies:

Mark Doerries

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Location: 542 O'Neill Hall of Music

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Web: <http://sacredmusic.nd.edu/>

Sacred music at Notre Dame is an independent graduate program housed in the College of Arts and Letters and relies on major participation of faculty from both the music and theology departments. The program in sacred music offers the master of sacred music (MSM) degree and the doctor of musical arts (DMA) degree.

### The Master of Sacred Music

Degree Requirements	
GPA Credits	48 credits
Total Credits	48 credits
Other	Admission to candidacy
	Recital / Performance
	Internship / Assistantship

The sacred music MSM is a two-year, 48-credit-hour terminal degree, consisting of courses in sacred music, liturgical studies, and applied music. Students apply in one of three concentrations: (1) choral conducting; (2) organ; or (3) vocal. Foreign language and some liturgy courses may be taken during the summer sessions. Mastery of the chosen field is required, and stu-

dents are encouraged to gain expertise in secondary areas as well.

In addition, all students:

- perform one recital per year (first-year vocal and conducting students perform a joint recital);
- attend the colloquium series, which usually meets six times per academic year; and
- are assigned an assistantship and must work for around 13 hours per week in these positions.

For specific course and credit requirements, refer to the program handbook.

### Doctor of Musical Arts

Degree Requirements	
GPA Credits	47 credits
Total Credits	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examination
	Recital / Performance
	Internship / Assistantship
	Doctoral dissertation

The sacred music DMA is a three-year 60-credit-hour degree consisting of 25 credit hours of academic coursework and 35 credits in performance, musicianship, and repertoire relevant to their concentration in organ or choral conducting. At least 47 GPA credits must be completed during the first 2 years of residency and prior to admission to candidacy. In the third year of residency, students continue with lessons and register for dissertation credits. The DMA is a stand-alone degree, separate from the appropriate

master's degree earned either at Notre Dame or at another institution.

### Admission to Candidacy

Admission to candidacy is a prerequisite to receiving a doctoral degree. To qualify for admission to doctoral candidacy, a student must: be in a doctoral program, complete the program coursework and language requirements with a cumulative GPA of 3.0 or better, pass the written and oral parts of the doctoral candidacy examination, and have the dissertation proposal approved (if this is not part of the candidacy exam).

### Foreign Language Requirement

As part of admission to candidacy by the end of the summer of the second year, the student must have met the program's requirements for competency in at least one foreign language. Competency in this language should be related to the student's dissertation topic but not be a student's native tongue. These courses are normally taken during the summer sessions.

### Candidacy Examination

The examination consists of two parts: a written component and an oral component. The written part of the examination normally precedes the oral part. It is designed, scheduled, and administered by the program. The oral part of the examination is normally taken after the completion of the 47 GPA credit hour coursework requirement. Normally, the candidacy examination is passed, and the dissertation topic approved, no later than the summer following the fourth semester of enrollment.

### The DMA Dissertation

In continuing consultation with the dissertation director, the candidate explores research and performance areas



in his or her field to formulate a proposal. The methods of approval of the dissertation proposal are determined by the student's program of study.

In addition, all students:

- perform one recital per year.
- attend the colloquium series, which usually meets six times per academic year.
- assigned an assistantship and must work for around 13 hours per week in these positions.

For specific course and performance requirements by concentration, see the program handbook.

## Tenured and Tenure-Track Faculty

Kimberly Belcher, Assistant Professor of Liturgical Studies

Alexander Blachly, Professor of Musicology

Christopher Chowrimootoo, Concurrent Assistant Professor of Musicology

Craig Cramer, Professor Emeritus of Organ

David Fagerberg, Professor of Liturgical Studies

Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy; Director of Sacred Music

Mary Frandsen, Associate Professor of Musicology

Peter Jeffery, Michael P. Grace Chair in Medieval Studies, Professor of Musicology and Ethnomusicology

Maxwell Johnson, Professor of Liturgical Studies

John Liberatore, Assistant Professor of Music Theory and Composition

Gabriel Radle, Concurrent Assistant Professor of Liturgy

Carmen-Helena Téllez, Professor of Conducting

## SPANISH

### Chair:

Alison Rice

### Director of Graduate Studies:

Joshua Lund

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## The Doctor of Philosophy

Degree Requirements	
GPA	45 credits
Credits	
Total Credits	60 credits
Other	Foreign language requirement
	Comprehensive examination
	Candidacy examination
	Doctoral defense
	Doctoral dissertation

The Ph.D. in Spanish is a highly selective program that teaches and trains students working in the field of Spanish and Latin American literatures and cultures. The program offers a flexible curriculum tailored to each student's interests and background and has a dissertation-oriented design that leads

to the successful writing and defense of a relevant dissertation that contributes to the candidate's area of study and that successfully places the candidate in the field and in the academic job market.

## Coursework

The Ph.D. in Spanish requires 45 credit hours of graduate coursework (including credit transfers, an advanced theory seminar, and a class on teaching methodology). Students must also complete a foreign-language requirement other than Spanish, a successful comprehensive exam, the candidacy examination and defense of the dissertation proposal, and the successful defense and submission of a doctoral dissertation. Coursework is typically finished by the end of the fourth semester, and must be completed by the end of the fifth semester.

For specific coursework requirements, consult the program's handbook.

## Examinations, Proposals, and Dissertations

The comprehensive exam is a process that spans the second and third semesters (including the summer in-between). Based on a reading list tied directly to the student's area of research, its objective is to prepare the student for the deep knowledge of specialization required of a dissertation project. The student is expected to demonstrate fluency in situating their research interests as they relate to major currents and traditions in the field.

The written candidacy examination and the oral defense of the dissertation proposal take place before the end of the fifth semester of study. At the end of the fifth year, the student gives a presentation on the dissertation and defends it publicly. No defenses are scheduled during the summer.

## Languages

Candidates must demonstrate near-native fluency in Spanish and advanced reading knowledge in a second language other than English. Students are encouraged to do coursework in the second language in order to develop real competency unless they are admitted already possessing such advanced reading knowledge.

## Second Area of Specialization

In addition to the primary area of focus, students will incorporate into their program of study a second, complementary area of specialization within the Department of Romance Languages and Literatures or another University academic unit. Examples of appropriate second areas of specialization include Portuguese, Italian, French, Latino Studies, Religion and Literature, Philosophy, Literary and Cultural Theory, Gender Studies, Memory Studies, Human Rights, and so on.

## Tenured and Tenure-Track Faculty

Thomas F. Anderson, Professor of Spanish

Pedro Aguilera-Mellado, Assistant Professor of Modern Spain

Ben Heller, Associate Professor of Spanish

Carlos Jáuregui, Associate Professor of Spanish

Joshua Lund, Professor of Spanish; Director of Graduate Studies, Spanish and French

Vanessa Miseres, Assistant Professor of Spanish

Marisel Moreno, Associate Professor of Spanish

María Rosa Olivera-Williams, Professor of Spanish

Juan Vitulli, Associate Professor of Spanish

## THEOLOGY

### Chair:

Timothy Matovina

### Directors of Graduate Studies:

Catherine Cavadini (M.A. program)

Todd Walatka (M.Div. program)

Robin Jensen (MTS program)

Joseph Wawreykow (Ph.D. program)

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Web: <http://theology.nd.edu>

## The Master of Arts

Degree Requirements	
GPA Credits	36 credits
Total Credits	36 credits
Other	Admission to candidacy
	Capstone course

The master of arts (M.A.) in theology is a 36 credit-hour terminal degree for individuals who desire advanced theological training. Graduates of this program should be able to serve as theological resources in a variety of settings. Recipients of this degree will have received instruction in the classical areas of theological inquiry.

M.A. students may take courses during the summer and/or academic year for credit towards their degree. In addition to completing the course requirements, students are expected to pass a capstone course, which includes a written paper and oral presentation based on a theme touching upon all areas of study within the discipline of theology, and made accessible to a particular audience.

For specific course, concentration and exam requirements, see the program handbook.

## The Master of Divinity

Degree Requirements	
<i>Lay Students</i>	
GPA Credits	60 credits
Total Credits	86 credits (theological and pastoral) 6 credits (human and spiritual formation)
Other	Admission to candidacy
	Synthesis Seminar project and presentation
	Participation in human and spiritual formation within the lay community
<i>Seminarian Students</i>	
GPA Credits	60 credits
Total Credits	108 credits (theological and pastoral)
Other	Admission to candidacy
	Synthesis Seminar project and presentation
	Formation within the context of the Congregation of Holy Cross

The master of divinity (M.Div.) is a professional theological degree designed to prepare students for learned and effective ministry in the Roman

## THEOLOGY

Catholic Church, either as priests or as professional lay ministers. The studies of Scripture, the history of Christian tradition, systematic theology, liturgy, and Christian ethics are joined to field experience, training in pastoral skills, integrative formation seminars and meetings, retreats and spiritual direction, and vocational formation to form a comprehensive ministerial curriculum. Thus, the M.Div. aims at a comprehensive, holistic integration of intellectual, pastoral, human and spiritual dimensions of preparation for ministry.

### The Program of Studies

The program of studies leading to the M.Div. for lay students requires 86 credits of theological and pastoral coursework and six credits of human and spiritual formation taken over six semesters. Candidates of the seminary are expected to complete 108 theological and pastoral credits taken over eight semesters. Seminarians are subject to additional formation requirements within the Congregation of Holy Cross as specified by the Vatican. All students complete the Synthesis Seminar project and presentation.

For specific course and credit requirements, refer to the program handbook.

### Field Education

Field education serves as an integral complement to the theological and pastoral education of ministry students, as well as to their spiritual and human formation and vocational preparation. Field education provides those preparing for ministry multiple and varied opportunities for acquiring ministerial skills within supervised and mentored contexts, for integrating their ministerial experiences through theological reflection, and ultimately for developing their ministerial identities. To make these opportunities

possible, field education consists of the following:

- weekly service at a ministerial site during each of the three academic years in the M.Div. program;
- regular individual supervision with an experienced mentor at the ministry site;
- weekly seminars utilizing case study method and conversations about contemporary theological and ministerial issues.

### Human and Spiritual Formation

All M.Div. students participate in a program of human and spiritual formation suited to their particular vocational preparation as seminarians, as vowed religious, or as candidates for lay ministry. Lay students engage in comprehensive human and spiritual formation within the formal context of the M.Div. program, including individual and communal formation meetings, retreats, days of recollection, and spiritual direction. Seminarians and vowed religious engage in these dimensions primarily within the context of the Congregation of Holy Cross. With the guidance of formators and spiritual directors, all students are mentored in the life of faith, in their personal growth, and in their ongoing vocational discernment. Regular joint formation events are also held, bringing all constituencies of the program together around shared issues and themes relative to their preparation for ministry.

## The Master of Theological Studies

Degree Requirements	
GPA Credits	48 credits
Total Credits	48 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examination

The master of theological studies (MTS) program trains graduate students for future doctoral work as well as alternative academic vocations in the various disciplines within the study of theology. The MTS is a 48-credit-hour degree designed to give students exposure to the full range of theological studies while also allowing them to develop competence in an area of concentration and to improve their language abilities. Along with two years of full-time coursework, the MTS also includes participation in the master's colloquium, competency in at least one modern language, and the completion of a comprehensive oral exam to be given at the end of the second year of coursework. The areas of biblical studies, history of Christianity, and liturgical studies also have ancient language requirements, and the area of world religions and world Church has a foreign language requirement.

In all there are six areas of concentration in the MTS program. Students must take at least 15 credit hours in the area of their concentration, and may take Ph.D. seminars, provided they first secure the permission of the course instructor and the MTS director.

In order to introduce every MTS student to a wide range of theological education, each area of study also involves requirements in other areas.

For specific course, concentration, language and exam requirements, see the program handbook.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	42 credits
Total Credits	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The doctoral program requires 42 credit hours of coursework. Students must specialize in one of six areas of concentration:

- Christianity and Judaism
- the history of Christianity
- liturgical studies
- moral theology/Christian ethics
- systematic theology,
- world religions and world Church

Within the program areas, students concentrate their coursework in a major field. These major fields are defined as follows: Christianity and Judaism in antiquity, Hebrew Bible and Judaica, New Testament and early church, history of Christianity, early Church, medieval studies, Reformation and modern studies, liturgical studies, moral theology/Christian ethics, systematic theology, and world religions and world Church.

### Residency

Students are expected to take 14 courses during two years of residency: eight of these must be in the major field of study; three must be outside the major fields; and three are electives.

Those students who enter with a master's degree or its equivalent may seek immediate admission to residency.

### Language Requirement

Students are required to pass examinations in a minimum of three languages, Greek or Latin, French, and German. Students in systematic theology may substitute Spanish for French or German.

For specific details on language requirements by area of study, see the program handbook.

The language requirement should be fulfilled as soon as possible and must be fulfilled by the fall of the third year.

### Independent Study

After the period of coursework, students spend a period of time, normally nine months, of independent study organized around a series of topics. These topics are meant to expand the students' intellectual breadth and skills and involve matters of inquiry that extend beyond their coursework. After consultation with the advisor, the student will propose a series of 10 topics, seven in the major field of study and three outside the major field. At least one of the topics in the major field will deal with the subject on which the student intends to write a dissertation. The program of independent study is approved by a committee and forms the basis for candidacy examinations.

### Candidacy Examinations

Offered in October and March, the examinations are usually taken in the second semester after the two-year residency and completion of the language requirements.

The exams consist of three days of written examinations and a 90-minute oral examination. Successful completion of the written examinations is required for admission to the oral examination.

### The Dissertation

The dissertation proposal is to be submitted by the beginning of the semester following oral candidacy examinations.

The completed dissertation must be defended and submitted within eight years of matriculation into the program.

### Joint Ph.D. Program in Peace Studies and Theology

In addition to the six major areas of concentration, the Department of Theology offers a Ph.D. in Theology and Peace Studies in partnership with Notre Dame's Kroc Institute for International Peace Studies. The degree includes a course of integrated studies so that graduates are fully credentialed in both theology and interdisciplinary peace research. The requirements for the Ph.D. in Theology and Peace Studies include the following: a minimum of 24 graded hours of credit in theology in one of the areas of concentration, and 18 graded hours in peace studies. Students will meet the theology department's minimum language requirements of two modern research languages (typically French and German) and one classical language (Latin or Greek).



## THEOLOGY

**Joint Ph.D. Program in Theology and the History and Philosophy of Science**

The History and Philosophy of Science Program at Notre Dame is a Ph.D. program. Graduate students pursue their studies in one of three tracks (either History, Philosophy, or Theology and Science), and have a second home in the corresponding department.

**Tenured and Tenure-Track Faculty**

Khaled Anatolios, John A. O'Brien Professor of Theology	John T. Fitzgerald, Professor	Cyril O'Regan, Catherine F. Huisiking Professor of Theology
Gary Anderson, Hesburgh Professor of Catholic Theology	Nina Glibetic, Assistant Professor	Rev. Hugh Rowland Page Jr., Vice President and Associate Provost for Undergraduate Affairs, Dean of the First Year of Studies, Professor of Theology and Africana Studies
Neil Arner, Assistant Professor	Jennie Grillo, Assistant Professor	R. Trent Pomplun, Associate Professor
J. Matthew Ashley, Associate Professor	Rev. Daniel G. Groody, C.S.C., Associate Professor	Jean Porter, John A. O'Brien Professor of Moral Theology
Ann W. Astell, Professor	Kevin Grove, Assistant Professor	Gabriel Radle, Assistant Professor
Yury Avvakumov, Associate Professor	M. Catherine Hilbert, O.P., Professor	Gabriel Said Reynolds, Professor
Steven Battin, Assistant Professor	Robin Jensen, Director of the MTS Program and Patrick O'Brien Professor of Theology	Maura A. Ryan, Vice President and Associate Provost, and Associate Professor of Theology
Kimberly Belcher, Associate Professor	Maxwell Johnson, Professor	Mun'im Sirry, Assistant Professor
Jeremy Brown, Assistant Professor	Emmanuel Katongole, Professor	Alexis Torrance, Associate Professor
John Betz, Associate Professor	Rev. Paul Kollman, C.S.C., Associate Professor and Executive Director, Center for Social Concerns	Joseph P. Wawrykow, Professor
Peter Casarella, Associate Professor	David Lantigua, Assistant Professor	Todd D. Whitmore, Associate Professor
John C. Cavadini, Director of Institute for Church Life and Professor of Theology	Ulrich Lerner, William K. Warren Professor	Abraham Winitzer, Associate Professor, Kapson Professor of Jewish Studies
David A. Clairmont, Associate Professor	Blake Leyerle, Associate Professor and Concurrent Associate Professor of Classics	
Rev. Brian Daley, S.J., Catherine F. Huisiking Professor of Theology	David Lincicum, Associate Professor	
Nathan Eubank, Associate Professor	Bradley J. Malkovsky, Associate Professor	
David Fagerberg, Professor	Timothy Matovina, Chair of Theology and Professor	
Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy	William Mattison, Associate Professor	
	Gerald McKenny, Director of the Ph.D. Program and Walter Professor of Theology	
	Francesca Murphy, Professor	
	Michael (Tzvi) Novick, Abrams Professor of Jewish Thought and Culture	
	Kenneth Oakes, Assistant Professor	
	Rev. Paulinus I. Odozor, C.S.Sp., Professor	



# THE DIVISION OF SCIENCE

## APPLIED AND COMPUTATIONAL MATHEMATICS AND STATISTICS

### Chair:

Bei Hu

### Director of Ph.D. Program:

Fang Liu

### Director of the M.S. Data Science Program:

Roger Woodard

### Director of the M.S. Professional Program:

Steven Buechler

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Fax: (574) 631-4822

Location: 102G Crowley Hall

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## The Master of Science: Data Science (Professional Degree)

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Admission to candidacy

Notre Dame's data science program is offered by the Department of Applied and Computational Mathematics and Statistics (ACMS), with the participation of faculty from the Mendoza College of Business and industry experts.

Designed to be completed in 21 months of half-time enrollment (six course credits per semester over five semesters), the data science program allows students to remain fully employed, while making steady academic progress.

After the on-campus introductory immersion weekend, the program utilizes an online format optimized for learning complex quantitative material, and features small, live classes taught by Notre Dame faculty and industry experts. Students have the option to attend exclusive immersion weekends that combine instruction and project work with industry roundtables and professional topics.

## The Master of Science (Professional Degree)

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Admission to candidacy

The professional master of science degree in ACMS trains students in the mathematical, statistical and computational tools used in data science, finance, computational biology or other technical fields. The intensive 11-month program combines coursework, projects in the student's chosen area of employment, and practical business training. Most students will seek employment immediately upon completion of this degree.

## The Master of Science (Ph.D. Track)

Degree Requirements	
GPA Credits	21 credits
Total Credits	30 credits
Other	Written examination
	Oral examination (ACMS Ph.D.)
	Oral examination (non-ACMS Ph.D.)

Students who are working toward a Ph.D. in the ACMS program may qualify for a master of science degree along the way, if they have accumulated 30 credit hours, passed the written candidacy examination, and passed the oral candidacy examination. For details of the requirements, refer to the program handbook.

Students working toward a Ph.D. in another Notre Dame doctoral program may also elect to pursue the master of science. To qualify, the student must submit a plan of study that is approved by his or her advisor, the ACMS director of graduate studies, and the ACMS department chair. To complete the requirements for this degree, the student must successfully pass both the written master's examination and an oral examination.

The program does not admit students directly to this degree.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	27 credits
Total Credits	73.5 credits
Other	Candidacy examination
	Doctoral dissertation

Doctoral students are required to complete 18 credits of ACMS courses at the graduate level in the first two semesters of study to remain in good standing. At the discretion of the director of graduate studies, a maximum of 6 credits of graduate level courses transferred from another university may be counted toward the required ACMS coursework for a student without a completed master's degree. For a student with a completed master's degree, the director of graduate studies will determine the number of transferred credits applied to the required ACMS coursework. Students are required to complete a minimum of 3 credits of regular or topic courses at graduate level each year and 0.5 credits of ACMS Applied Mathematics or Statistics Seminar between the

second and the fourth year to improve knowledge.

### Written and Oral Candidacy Examinations

The written examination must be completed before the start of year two. Students have two chances to pass the written examination: during year one in the first week of June, and again one week before the start of the fall semester of year two.

The oral candidacy examination follows the completion of the written examination, and focuses on an advanced topic. Students are encouraged to take the examination as early as possible. In general, students must take the oral candidacy examination by April 15 in the second year. The director of graduate studies may allow exceptions for special circumstances.

For additional degree requirements, refer to the program handbook.

### Tenured and Tenure-Track Faculty

Steven Buechler, Director of Graduate Studies (M.S. program) and Emeritus Professor

Martina Bukač, Associate Professor

Stefano Castruccio, Assistant Professor

Guosheng Fu, Robert and Sara Lumpkins Assistant Professor

Jonathan Hauenstein, Associate Chair and Professor

Bei Hu, Chair and Professor

Alexandra Jilkine, Assistant Professor

Jun Li, Professor

Lizhen Lin, Robert and Sara Lumpkins Associate Professor

Alan Lindsay, Associate Professor

Fang Liu, Director of Graduate Studies (Ph.D. program) and Associate Professor

Marie Lynn Miranda, Provost of the University and Professor

Dong Quan Ngoc Nguyen, Assistant Professor

Robert Rosenbaum, Huisiking Foundation, Inc. Assistant Professor of Applied and Computational Mathematics and Statistics

Daniele Schiavazzi, Assistant Professor

Giuseppe Vinci, Assistant Professor

Daren Wang, Assistant Professor

Zhiliang Xu, Associate Professor

Yongtao Zhang, Professor

## BIOLOGICAL SCIENCES

### Chair:

Jason Rohr

### Director of Graduate Studies:

Rebecca Wingert

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Location: 100 Galvin Life Sciences Center

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### The Master of Science

Degree Requirements	
GPA Credits	12 credits



## BIOLOGICAL SCIENCES

Degree Requirements	
Total Credits	30 credits
Other	Candidacy examination
	Master's thesis

The master of science degree is a 30-credit-hour program requiring the satisfactory completion of a minimum of 12 credit hours of coursework, passing a research proposal review, and completing a suitable master's thesis.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	12 credits
Total Credits	60 credits
Other	Candidacy examination
	Doctoral dissertation

For the degree of doctor of philosophy, the student is expected to complete a minimum of 60 total credit hours. This is composed of at least 12 credit hours of coursework and the remainder as dissertation research. The student must pass a comprehensive candidacy examination consisting of both an oral and a written examination. After the student is admitted to candidacy, he or she must then defend and submit a written dissertation.

Students in the doctoral degree program must also fulfill a one-year teaching requirement that usually involves assisting in the instruction of undergraduate or graduate laboratory courses. This requirement may be automatically fulfilled if the student has a graduate assistantship for financial aid.

## Tenured and Tenure-Track Faculty

Elizabeth Archie, Associate Professor and Assistant Chair

Gary E. Belovsky, Emeritus Professor

Nora J. Besansky, O'Hara Professor and Associate Chair

Sunny K. Boyd, Professor

Patricia Champion, Associate Professor

Frank H. Collins, Professor Emeritus

Crislyn D'Souza-Schorey, Morris Polard Professor

Giles E. Duffield, Associate Professor

John G. Duman, Professor Emeritus

Jeffrey L. Feder, Professor

Michael T. Ferdig, Professor

Ana Flores-Mireles, Janet C. and Jeffrey A. Hawk Assistant Professor

Malcolm J. Fraser Jr., Rev. Julius A. Nieuwland, C.S.C. Professor

Paul R. Grimstad, Professor Emeritus

Kasturi Haldar, Rev. Julius A. Nieuwland, C.S.C. Professor and James C. Parsons and Carrie Ann Quinn Director of the Center for Rare and Neglected Diseases

Ronald A. Hellenthal, Professor Emeritus

Hope Hollocher, Associate Professor

David R. Hyde, Professor and Rev. Howard J. Kenna, C.S.C., Memorial Director of the Zebrafish Research Center

Stuart Jones, Associate Professor

Christian Koepfli, Assistant Professor

Charles F. Kulpa Jr., Professor Emeritus

Gary A. Lamberti, Professor

Shaun Lee, Ann and Daniel Monahan Family Associate Professor

Lei Li, Associate Professor

David M. Lodge, Professor Emeritus

Xin Lu, John M. and Mary Jo Boler Assistant Professor

Mary Ann McDowell, Associate Professor

Jason S. McLachlan, Associate Professor

David Medvigy, Associate Professor

Joseph E. O'Tousa, Professor

Athanasia D. Panopoulos, Elizabeth and Michael Gallagher Family Assistant Professor

Christopher Patzke, Assistant Professor

Alex T. Perkins, Eck Family Associate Professor

Michael Pfrender, Professor and Genomics Core Director

Matthew J. Ravosa, Professor

Adrian Rocha, Associate Professor

Jason Rohr, Ludmilla F., Stephen J., and Robert T. Galla College Professor of Biological Sciences and Department Chair

Jeanne Romero-Severson, Professor

Felipe Santiago-Tirado, Assistant Professor

Zachary T. Schafer, Coleman Associate Professor and Assistant Chair

Jeffrey S. Schorey, George B. Craig Jr. Professor

David W. Severson, Professor Emeritus

Cody Smith, Elizabeth and Michael Gallagher Family Assistant Professor

Jennifer L. Tank, Ludmilla F., Stephen J., and Robert T. Galla Professor

Gregory Timp, Keough-Hesburgh Professor of Electrical Engineering and Biological Studies

Kevin T. Vaughan, Associate Professor

Rebecca Wingert, Elizabeth and Michael Gallagher Family Associate Professor and Director of Graduate Studies

Siyuan Zhang, Nancy Dee Associate Professor

The program ordinarily will not accept a student who intends to complete only the master's degree. However, a program leading to the degree of master of science (M.S.) is available; it involves satisfactory completion of graduate coursework without any thesis requirement.

Requirements for the M.S. include a total of 30 credit hours in courses and research. Students must include at least six credit hours of research in their M.S. program. The remainder of the credit hours must be graded coursework from the Ph.D. curriculum, as described in the program handbook, selected with approval of the DGS.

relevant to the general conduct of biophysics research, as well as courses specific to each research track. After the first year, students take coursework further tailored to their needs and interests, selected in consultation with their advisor. Biomedical research ethics is emphasized early in the program. For details regarding specific course requirements, refer to the program handbook.

Most students will have completed their courses by the end of their second year, permitting dissertation research to proceed full-time.

During their first academic year (August through May), students are exempt from teaching assistant duties, and participate in three successive ten-week research rotations. These rotations allow students to directly engage in research, contributing to the ongoing scientific investigations in each laboratory. The three rotations expose students to a range of complementary biophysics research and allow students to learn a variety of experimental techniques.

There is no foreign language requirement for a Ph.D. in biophysics.

In addition to coursework, there are three examinations to be passed for a Ph.D. — a written and oral Academic and Research Progress (ARP) exam, a written and oral Ph.D. candidacy examination, and an oral Ph.D. dissertation defense. The ARP exam is typically taken during the fourth semester. The candidacy examination is typically taken in the sixth or seventh semester, after coursework is complete.

Candidacy examinations and dissertation requirements follow the traditions and formats currently in place in the research director's home department.

To remain in good standing, students are required to: maintain a 3.0 grade point average, pass the ARP exam by

## BIOPHYSICS

### Director of Graduate Studies:

Patricia L. Clark

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### The Doctor of Philosophy

Degree Requirements	
GPA Credits	24 credits
Total Credits	60 credits
Other	Laboratory rotations (3)
	Academic and research progress examination
	Candidacy examination
	Doctoral defense and dissertation

The biophysics Ph.D. is an interdisciplinary program that offers students the opportunity to participate in research that crosses home department boundaries. All students admitted to the program ultimately identify themselves with one of three research and training tracks, depending on their interests.

Requirements for the Ph.D. include at least 24 credit hours of coursework and a total of 60 credit hours in courses and research. During the first year, this includes general courses

### The Master of Science

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Academic and research progress examination

The graduate program in biophysics is primarily a doctoral program, leading to the degree of doctor of philosophy.

the end of their fourth semester, pass the candidacy exams before the end of their fourth year, and submit and defend a doctoral dissertation before the end of their eighth year.

The minimum residence requirement for the Ph.D. degree is four consecutive semesters and may include summer session.

## CHEMISTRY AND BIOCHEMISTRY

### Chair:

Brian Baker

### Director of Graduate Studies:

Gregory Hartland

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E-mail: [chemistry@nd.edu](mailto:chemistry@nd.edu)

Web: <http://chemistry.nd.edu>

## The Master of Science

Degree Requirements	
GPA Credits	18 credits
Total Credits	30 credits
Other	Academic and research progress examination
	Master's thesis (at advisor's discretion)

The program in chemistry and biochemistry does not admit students directly into a master of science (M.S.) program. However, if at the time of the academic and research progress (ARP) examination, the student is

deemed ineligible to continue in the Ph.D. program, they may be moved to the M.S. program, and in their third semester may be eligible to receive a M.S. degree.

At the discretion of the advisor and only with the advisor's financial support, a student who is moved into the M.S. program may have the option of completing a thesis in the advisor's laboratory. In such a case, provided the advisor is willing and able to provide funding, the student may remain in the program until completion of the thesis or the end of the fifth year, although the student may choose to leave with a non-research M.S. at any time.

If the advisor is unable or unwilling to act as the student's thesis director, a non-research M.S. degree is available, provided the student has completed the coursework requirements and has attempted the ARP examination.

Following the recommendation of the student's advisor and committee, it may be possible for a student who has completed a thesis to re-enter the doctoral program, pending approval by the director of graduate studies or the department chair. A student who has re-entered the Ph.D. program will receive written confirmation from the director of graduate studies.

For additional degree requirements, refer to the program handbook.

## The Doctor of Philosophy

Degree Requirements	
Courses	18 credits
Total	60 credits
Other	Academic and research progress examination
	Candidacy examination
	Doctoral dissertation

Graduate students pursuing a Ph.D. in chemistry or biochemistry must complete at least 18 credits of coursework prior to the end of their third semester. A combined total of 60 credits are required; this total includes all courses taken, including not only instructional coursework, but research, seminars, directed readings, etc. The program may accept coursework completed at another accredited university toward meeting the requirements for either doctoral degree.

To continue in the Ph.D. program, students must pass the academic and research progress (ARP) exam. The ARP exam is taken during a student's third semester; to be eligible for the exam, the student must be in good academic standing in the department. The exam consists of a written document and an oral defense in front of the student's committee.

Admission to candidacy for the Ph.D. occurs after completion of written and oral examinations in the area of specialization. Once admitted to candidacy, the student must then write, defend and submit a doctoral dissertation to complete the degree requirements.

For additional degree requirements, refer to the program handbook.

## Tenured and Tenure-Track Faculty

Brandon Ashfeld, Associate Professor

Brian M. Baker, Chair and Rev. John A. Zahm Professor

Brian Blagg, Charles Huisking Professor and Director, Warren Family Research Center for Drug Discovery and Development

Paul Bohn, Arthur J. Schmitt Professor

Jessica Brown, Clare Boothe Luce Assistant Professor

Seth N. Brown, Professor	M. Kenneth Kuno, Professor
Jon P. Camden, Professor and Director of Undergraduate Studies	Graham Lappin, Professor
Ian C. Carmichael, Professor and Director of Radiation Laboratory	Marya Lieberman, Professor
Francis J. Castellino, Kleiderer-Pezold Professor of Biochemistry and Director, WM Keck Center for Transgene Research	Laurie Littlepage, Campbell Family Associate Professor of Cancer Research
Matthew Champion, Associate Professor	Christian Melander, George and Winifred Clark Professor
Patricia L. Clark, Rev. John Cardinal O'Hara, C.S.C. Professor	Shahriar Mobashery, Navari Family Professor in Life Sciences
Steven A. Corcelli, Professor and Associate Dean for Interdisciplinary Studies and Faculty Development	Jeffrey W. Peng, Associate Professor
Juan Del Valle, William K. Warren Family Associate Professor	Anthony S. Serianni, Professor
Mary Galvin, William K. Warren Foundation Dean, College of Science and Professor	Arnaldo Serrano, Assistant Professor
Haifeng Gao, Associate Professor and Director of Graduate Admissions	Slavi C. Sevov, Professor
J. Daniel Gezelter, Professor and Associate Dean for Undergraduate Studies	Bradley D. Smith, Emil T. Hofman Professor of Chemistry and Biochemistry
Holly V. Goodson, Professor	Sharon Stack, Kleiderer-Pezold Professor of Biochemistry and Ann F. Dunne and Elizabeth Riley Director, Harper Cancer Research Institute
Gregory V. Hartland, Professor and Director of Graduate Studies	Richard E. Taylor, Professor
Paul Helquist, Professor	Emily Tsui, Assistant Professor
Paul W. Huber, Professor	Rebecca Whelan, Associate Professor
Vlad M. Iluc, Associate Professor	Katherine White, Clare Boothe Luce Assistant Professor
Adam Jaffe, Assistant Professor (Starting Fall 2021)	Olaf G. Wiest, Professor
Prashant V. Kamat, John A. Zahm Professor of Science	
S. Alex Kandel, Associate Professor	

## ENGINEERING, SCIENCE AND TECHNOLOGY ENTREPRENEURSHIP EXCELLENCE MASTER'S PROGRAM

### Program Director:

David Murphy

### Director of Graduate Studies:

Kyle Williams

Telephone: (574) 631-0097

Location: 1400 E. Angela Blvd.

E-mail: [esteem@nd.edu](mailto:esteem@nd.edu)

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## The Master of Science

Degree Requirements	
GPA	32 credits
Credits	
Total Credits	35 credits
Other	Capstone defense
	Capstone project

The curriculum of the 11-month master of science program in Engineering, Science and Technology Entrepreneurship Excellence (ESTEEM) is designed to further STEM technical training and build business skills through the lens of entrepreneurship, delivered by faculty members who have lived it.

Strategically integrated with the curriculum, the year-long capstone project serves as the real-world sandbox in which students apply classroom skills to a real-world technology commercialization effort. The timeline of the capstone project matches the sequence of classes through the year, and in



many cases, assignments in class are used to advance the student's project.

The curriculum is divided into three parts, which take place over the course of three terms (Summer, Fall, Spring). During the course of these terms, students are expected to fulfill the following requirements.

- Complete entrepreneurial-focused business courses ranging from accounting financials to development of a launch strategy.
- Pass six credit hours of electives, typically related directly to the student's capstone project.
- Defend and submit their capstone project related to commercialization of a technology or development of a business-case for a product or service.

For additional course and degree requirements, refer to the program handbook.

## GLOBAL HEALTH

**Director of Global Health Training:**  
Heidi Beidinger

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Web: <http://globalhealth.nd.edu>

### The Master of Science (Professional Degree)

Degree Requirements	
GPA Credits	32 credits

Degree Requirements	
Total Credits	32 credits
Other	6–8 weeks of field experience
	Capstone project

The master of science in global health (M.S.) program provides an engaging science-centric training in the context of global health. The program is a one year, intensive training that includes two semesters of coursework and one (summer) semester of a field research practicum, called the capstone project which enables students to make connections between classroom learning and real health needs of resource-limited settings around the world through a hands-on six to eight week field experience.

## INTEGRATED BIOMEDICAL SCIENCES

**Director of Graduate Studies:**  
Holly Goodson

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### The Doctor of Philosophy

Degree Requirements	
GPA Credits	24 credits
Total Credits	60 credits
Other	Laboratory rotations (3)
	Academic and research progress exam

Degree Requirements	
	Candidacy examination
	Doctoral dissertation

The integrated biomedical sciences (IBMS) Ph.D. is an interdisciplinary program that offers students the opportunity to participate in research that crosses home department boundaries. All IBMS students admitted to the program ultimately identify themselves with one of eight research and training clusters, depending on their interests.

During their first academic year (August through May), students are exempt from teaching assistant duties, and participate in three successive ten-week research rotations. The rotations, performed in laboratories chosen by the student, allow students to directly engage in research, contributing to the scientific investigations ongoing in each laboratory. The three rotations expose students to a range of complementary biomedical research and allow students to learn a variety of experimental techniques.

IBMS students are expected to complete at least 24 credit hours of coursework. During the first year, this includes general courses relevant to the general conduct of biomedical research as well as courses specific to each research and training cluster. After the first year, students take coursework further tailored to their needs and interests, selected in consultation with their advisor. Biomedical research ethics is emphasized early in the program.

Most students will have completed their courses by the end of their second year, permitting dissertation research to proceed full-time.

Candidacy examinations and dissertation requirements follow the traditions and formats currently in place in the research director's home department.

For more information on course and program requirements, see the program handbook.

## MATHEMATICS

### Chair:

Richard Hind

### Director of Graduate Studies:

Samuel Evens

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## The Master of Science

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Candidacy examination

A student who is working toward a Ph.D. in mathematics may qualify for a master of science degree along the way, if he or she has accumulated 30 credit hours, has passed the written candidacy examination, and has either passed the oral candidacy examination or (without passing) exhibited sufficient knowledge to obtain a positive recommendation from the examiners.

Students are not normally admitted directly to the master's program.

## The Master of Science in Interdisciplinary Mathematics

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Candidacy examination
	Master's thesis or project

The Department of Mathematics offers a master of science in interdisciplinary mathematics (MSIM) degree primarily for students who are already pursuing a Ph.D. with another Notre Dame graduate program. The goal of this degree is to produce skilled and creative scholars who will be able to use sophisticated techniques in their professional activities and go beyond the established mathematical paradigms in their particular areas of interest.

The program of study for the MSIM consists of a core mathematics component of 9–12 credit hours and an interdisciplinary component of 12–15 credit hours. An appropriate selection of courses in any graduate discipline at Notre Dame that makes serious use of mathematics will meet the interdisciplinary course requirement. At most, 9 credit hours can be double-counted (i.e., counted toward the Ph.D. in another department).

The final requirement for the MSIM is a master's thesis or project. For the thesis option, the student pursues an interdisciplinary master's thesis written, defended, and submitted according to the standard procedures of the Graduate School. In lieu of a defense or formal committee, the project option requires the approval of the Director of Graduate Studies (DGS) of the graduate program in mathematics and of the cooperating program, the

student's advisor(s), and the Dean of the Graduate School.

Students are not normally admitted directly to the MSIM program.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	36 credits (basics and topics)
Total Credits	60 credits
Other	Candidacy examination
	Doctoral dissertation

Students in the mathematics doctoral program are expected to complete at least 36 credit hours of coursework (basics and topics) and four consecutive semesters of full-time study. First-year students have no teaching duties.

The written candidacy examination is passed by getting at least a B in any 6 basics classes and must be completed during the first year. The oral candidacy examination is taken during the second year.

Once the student is admitted to degree candidacy, he or she must write, defend and successfully submit a doctoral dissertation to complete the requirements for the Ph.D.

Most students complete the program within five years.

For more information on course and program requirements, see the program handbook.

## Tenured and Tenure-Track Faculty

Katrina D. Barron, Associate Professor

Mark Behrens, Professor, John and Margaret McAndrews Chair

Peter Cholak, Professor

Jeffrey Diller, Professor

Matthew J. Dyer, Professor and Associate Chair

Nicholas Edelen, Assistant Professor

Samuel Evens, Professor, Director of Graduate Studies, and Director of Graduate Admissions

David Galvin, Professor

Michael Gekhtman, Professor

Matthew Gursky, Professor

Brian Hall, Professor

Qing Han, Professor

Alex Himonas, Professor

Richard Hind, Professor and Department Chair

Felix Janda, Assistant Professor

Alexandra Kjachokova, Assistant Professor

Julia F. Knight, Professor, Charles L. Huisling Professor of Mathematics

Juan C. Migliore, Professor

Gerard K. Misiolek, Professor

Pavel Mnev, Assistant Professor

Liviu Nicolaescu, Professor

Anand Pillay, Professor, William J. Hank Family Professor

Juanita Pinzon, Assistant Professor

Claudia Polini, Professor, Rev. John Cardinal O'Hara, C.S.C. Professor of Mathematics

Andrew Putman, Professor, Notre Dame Professor of Topology

Marco Radeschi, Assistant Professor

Claudiu Raicu, Associate Professor

Eric B. Riedl, Assistant Professor

Christopher Schommer-Pries, Assistant Professor

Alexander Shapiro, Assistant Professor

Mei-Chi Shaw, Professor

Roxana Smarandache, Professor

Sergei Starchenko, Professor

Stephan A. Stolz, Professor, Rev. John A. Zahm, C.S.C. Professor of Mathematics

Gábor Székelyhidi, Professor, Notre Dame Professor of Mathematics

Laurence R. Taylor, Professor

Additional Associated Faculty

Andrei Jorza, Associate Professor of the Practice

Arthur Lim, Professor of the Practice

Sonja Mapes Székelyhidi, Associate Professor of the Practice, Director of Undergraduate Studies

Brian Mulholland, Assistant Professor of the Practice

Kathryn Mulholland, Assistant Professor of the Practice

Annette Pilkington, Professor of the Practice

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 Web: <http://medicine.iu.edu/south-bend>

## The Program of Studies

The University of Notre Dame Graduate School and the Indiana University School of Medicine – South Bend (IUSM – SB) offer a joint M.D./Ph.D. degree for exceptional students interested in academic medicine.

To earn the joint degree, students complete the first two years of medical school at IUSM – SB and continue at Notre Dame for three more years to pursue the University's doctoral degree through the Graduate School. The last two years of medical school then will be completed at the Indiana University School of Medicine's South Bend campus or any other School of Medicine campus throughout the state which offers the 3rd and 4th year. Since it is now possible to complete all four years of medical school in South Bend, the traditional schedule outlined above may be modified to pursue both the M.D. and the Ph.D. over a 6–7 year period.

Program descriptions and requirements for all of Notre Dame's doctoral programs, may be found elsewhere in this *Bulletin*. Students in the M.D./Ph.D. program may pursue the doctoral degree in any of these disciplines.

Admission to the program requires separate applications to the Notre Dame Graduate School and the Indiana University School of Medicine. The Graduate School will accept MCAT scores in place of the GRE scores normally expected of applicants. The parallel applications are coordinated and tracked by the IUSM – SB which serves as the central office for the combined degree program. Repre-

## M.D./PH.D. JOINT DEGREE PROGRAM

**Director of Regional Medical Education:**  
 Stacey Jackson

Telephone: (574) 631-5574

## PHYSICS

sentatives from Notre Dame and the I.U. School of Medicine monitor and oversee the program.

## PHYSICS

### Chair:

Peter Garnavich

### Director of Graduate Studies:

Mark A. Caprio

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Location: 225 Nieuwland Science Hall

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Web: <http://physics.nd.edu>

## The Master of Science

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Candidacy examination

The graduate program in physics is primarily a doctoral program, leading to the degree of doctor of philosophy. The department ordinarily will not accept students who intend to complete only the master's degree. However, a program leading to the degree of master of science is available, and requires satisfactory completion of graduate coursework without any thesis requirement.

Requirements for the M.S. include a total of 30 credit hours in courses and research. Students may include up to six credit hours of research or ungraded coursework in their M.S. program. The remainder of the credit hours

must be graded coursework from the Ph.D. curriculum, as described in the program handbook, selected with approval of the DGS. In addition to coursework, the student must pass an oral master's examination.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	27 credits
Total Credits	60 credits
Other	Preliminary examination
	Candidacy examination
	Doctoral dissertation

Requirements for the Ph.D. in physics include a total of 60 credit hours in courses and research, including 27 hours of graded coursework. For details regarding the experimental proficiency requirement and specific course requirements, refer to the program handbook.

There is no foreign language requirement for a Ph.D. in physics.

In addition to coursework, there are three examinations to be passed for a Ph.D. — a written preliminary examination on undergraduate physics, a written and oral Ph.D. candidacy examination, and an oral Ph.D. dissertation defense. Students first take the preliminary exam in the fall of their first year, and must pass it by the beginning of the second year. The candidacy examination is typically taken in the third year, after coursework is complete.

To remain in good standing, students are required to: maintain a 3.0 grade point average, pass the preliminary examination by the beginning of the second year, maintain satisfactory

progress in coursework and research as detailed in the program handbook, pass the candidacy exams by the end of the fourth year, and defend and submit a doctoral dissertation by the end of the eighth year.

The minimum residence requirement for the Ph.D. degree is four consecutive semesters.

## Tenured and Tenure-Track Faculty

Tan Ahn, Assistant Professor

Ani Aprahamian, Frank M. Freimann Professor of Physics

Badih Assaf, Frank M. Friemann Assistant Professor of Physics

Dinshaw Balsara, Professor

Dan Bardayan, Professor

Timothy Beers, Notre Dame Chair in Astrophysics, Professor

Maxime Brodeur, Ortenzio Family Assistant Professor in Applied Medical and Nuclear Physics

Bruce A. Bunker, Professor

Mark A. Caprio, Associate Professor and Director of Graduate Studies

Jeffrey K. Chilcote, Assistant Professor

Philippe A. Collon, Associate Professor and Associate Chair and Director of Undergraduate Studies

Manoel Couder, Assistant Professor

Justin R. Crepp, Professor

Antonio Delgado, Professor

Malgorzata Dobrowolska-Furdyna, Rev. John Cardinal O'Hara, C.S.C. Professor of Physics, and Associate Dean for Undergraduate Students, College of Science



## PHYSICS

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Morten R. Eskildsen, Professor	Anna Simon, Assistant Professor
Stefan G. Frauendorf, Professor	Rebecca Surman, Professor
Jacek K. Furdyna, the Aurora and Tom Marquez Professor of Physics and Fellow of the Nanovic Institute for European Studies	Carol E. Tanner, Professor
Umesh Garg, Professor	Zoltán Toroczkai, Professor and Director of the Interdisciplinary Center for Network Science and Applications
Peter M. Garnavich, Professor and Chair	Dervis Can Vural, Assistant Professor
Kenjiro K. Gomes, Frank M. Freimann Assistant Professor	Mitchell R. Wayne, Professor
Michael D. Hildreth, Professor	Michael C. F. Wiescher, Frank M. Freimann Professor of Physics, Director of the Joint Institute for Nuclear Astrophysics, and Director of the Institute for Structure and Nuclear Astrophysics
J. Christopher Howk, Professor	
Boldizsár Jankó, Professor and Director of the Institute for Theoretical Sciences	
Colin P. Jessop, Professor	
Christopher F. Kolda, Professor and Director of Glynn Family Honors Program	
Kevin A. Lannon, Associate Professor	
Craig Lent, Concurrent Professor	
John M. LoSecco, Professor	
Adam Martin, Assistant Professor	
Grant J. Mathews, Professor and Director of the Center for Astrophysics	
Kathie E. Newman, Professor	
Graham Peaslee, Professor	
Jeffrey W. Peng, Concurrent Associate Professor	
Sylwia Ptasínska, Associate Professor	
Terrence W. Rettig, Professor	
Randal C. Ruchti, Professor	
Steven T. Ruggiero, Professor	
Jonathan R. Sapirstein, Professor	



# THE DIVISION OF SOCIAL SCIENCES

## ANTHROPOLOGY

### Chair:

Mark Schurr

### Director of Graduate Studies:

Christopher Ball

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## The Master of Arts

Degree Requirements	
GPA	30 credits
Credits	
Total Credits	36 credits
Other	Admission to candidacy
	Preparation of reading list
	Candidacy examinations or a written thesis

The graduate program in anthropology does not typically admit students directly into the master of arts (M.A.) program. Students pursuing a doctorate in anthropology may elect to earn a master of arts degree on the way to the Ph.D.

If a student does not successfully pass the qualifying examinations to proceed to doctoral candidacy, he or she may

be eligible to leave the program with a terminal M.A.

## The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Candidacy examinations
	Fieldwork
	Doctoral dissertation

Doctoral candidates follow a trajectory of study in methods and theory, based on the sub-fields of Anthropology, with flexible language, laboratory and field training depending upon perceived need and as determined by their individual research agenda. Along with required courses in the first two years of study, students make a research presentation at the end of the spring term. Students in their second year are normally expected to be teaching assistants in two classes.

In the fall term, third-year students take comprehensive examinations, and prepare a formal dissertation proposal that is suitable for submission to an external funding agency. Third years also prepare and submit grant proposals to external agencies to fund their dissertation fieldwork.

In the fourth and fifth year of study, students engage in completing their dissertation fieldwork; write, defend, and submit their dissertations; and submit manuscripts for publication. All requirements should ideally be completed within five years.

For specific course, field work, and exam requirements, see the program's Graduate Student Guide.

## Tenured and Tenure-Track Faculty

Maurizio Albahari, Associate Professor

Christopher Ball, Assistant Professor  
and Director of Graduate Studies

Susan D. Blum, Professor

Catherine Bolten, Associate Professor

Alex E. Chávez, Assistant Professor

Meredith S. Chesson, Associate Professor

Lee Gettler, Assistant Professor

Donna Glowacki, Associate Professor

Mark Golitko, Assistant Professor

Ian Kuijt, Professor

Cara Ocobock, Assistant Professor

Natalie Porter, Assistant Professor

Mark Schurr, Professor and Chair

Susan Guise Sheridan, Associate Professor

Vania Smith-Oka, Associate Professor

## ECONOMICS

### Chair:

Eric Sims

### Director of Graduate Studies:

Drew D. Creal

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## The Master of Arts

Degree Requirements	
Courses	27 credits
Total	30 credits
Other	Comprehensive examinations

The economics program does not administer a stand-alone master of arts (M.A.) program, but allows students to apply for an M.A. should they choose to terminate their study in the Ph.D. program. The M.A. degree is awarded to those who successfully complete the core courses, pass the comprehensive exams at the M.A. level or better, and meet University requirements for the M.A.

## The Doctor of Philosophy

Degree Requirements	
Courses	45 credits
Total	60 credits
Other	Comprehensive examinations
	Candidacy examinations
	Doctoral dissertation

Students in the doctoral program in economics are expected to complete a minimum of 45 credit hours of approved coursework at the graduate level to obtain the Ph.D. Satisfactory performance requires a grade of B- or better in each and every graduate course with a cumulative GPA of at least 3.0 (corresponding to the grade B).

There is no foreign language requirement for graduate students in economics.

Students commence their studies with a "core" group of required courses that should be completed the first year. During the second year, students begin to develop their field specializations through continued coursework, and complete a research paper. From the third semester on (fall semester of the second year), the student will be required to participate in a research seminar in his or her chosen fields. Participation means presenting updates of the student's own research and critically analyzing that of others.

For additional information regarding coursework and project requirements, consult the program handbook.

To complete the requirements for the Ph.D., students must defend and submit a written doctoral dissertation. The expected time to completion of the Ph.D. is five years.

## Examinations

Shortly after completing the core, students take comprehensive written exams in microeconomic and macroeconomic theory and econometrics to assess the students' command of the essential concepts and methods necessary to read the literature and to perform research at the disciplinary frontier. Possible outcomes of the comprehensive exams are (a) Ph.D. pass, (b) M.A. pass, (c) fail. Students need to attain a Ph.D. pass in two out of the three exams with an M.A. pass in the third exam. Students who do not pass an exam have one opportunity for a retake later in the summer following the first year, typically about a month after the first attempt. Failure to pass two out of the three exams at the Ph.D. level results in dismissal from the program.

Students must be admitted to candidacy by the end of the fourth year by passing the candidacy exam which consists of written and oral components. The written part precedes the oral part and is satisfied by either a dissertation proposal or a paper that will become a chapter of the dissertation. The oral part should be taken no later than one calendar year prior to the defense of the dissertation.

## Tenured and Tenure-Track Faculty

Ruediger Bachmann, Stepan Family College Professor of Economics

Christiane Baumeister, Robert and Irene Bozzone Associate Professor and Associate Chair

Marinho Bertanha, Gilbert F. Schaefer Assistant Professor

Kasey Buckles, Brian and Jeannelle Brady Associate Professor



Robert Collinson, Wilson Family LEO  
Assistant Professor

Kirsten Cornelson, Assistant Professor

Drew Creal, Patrick J. O'Malley and  
Christine A. O'Malley Associate  
Professor and Director of Gradu-  
ate Studies

Christopher Cronin, Assistant Profes-  
sor

Jeroen Dalderop, Assistant Professor

Taryn Dinkleman, Associate Professor

Kirk B. Doran, Henkels Family Colle-  
giate Chair and Associate Professor

William N. Evans, Keough-Hesburgh  
Professor of Economics

Nilesh Fernando, Assistant Professor

John Firth, Assistant Professor

Chloe Gibbs, Assistant Professor

Thomas A. Gresik, Professor

Matthias Hoelzlein, Assistant Professor

Daniel M. Hungerman, Professor

Lakshmi Iyer, Associate Professor

Robert Johnson, Associate Professor

Joseph Kaboski, David F. and Erin  
M. Seng Foundation Professor of  
Economics

Illenin Kondo, Assistant Professor

Maciej Kotowski, Associate Professor

Byung-Joo Lee, Associate Professor

Ethan Lieber, Associate Professor

Nelson C. Mark, Alfred C. DeCrane  
Jr. Professor of Economics

Michele Muller-Itten, Assistant Profes-  
sor

Michael J. Pries, Associate Professor

Benjamin Pugsley, Assistant Professor

Kali P. Rath, Associate Professor

Eric Sims, Professor and Department  
Chair; Michael P. Grace II Col-  
legiate Chair

Cesar Sosa-Padilla, Assistant Professor

Zachary Stangebye, Assistant Professor

James X. Sullivan, Gilbert F. Schaefer  
College Professor of Economics

Jing Cynthia Wu, Dillon Hall Associ-  
ate Professor

Jasmine Xiao, Assistant Professor

## EDUCATION

### Director of the MAEL Program:

Sr. Kathleen Carr, CSJ (Interim  
Director)

### Director of the M.Ed. Program:

Sister Gail Mayotte, SASV

### Director of Graduate Studies:

Christie Bonfiglio

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Location: 107 Carole Sandner Hall

E-mail: (MAEL)

[kcarr4@nd.edu](mailto:kcarr4@nd.edu) or

[cbonfiglio@nd.edu](mailto:cbonfiglio@nd.edu)

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[ace.1@nd.edu](mailto:ace.1@nd.edu) or

[cbonfiglio@nd.edu](mailto:cbonfiglio@nd.edu)

Web: <http://ace.nd.edu>

## The Master of Arts in Educational Leadership

Degree Requirements	
GPA Credits	44 credits
Total Credits	44 credits
Other	Administrative internship
	Program portfolio
	School Leaders Licensure Assessment

The master of arts in educational leadership (MAEL) degree program prepares, educates, and supports selected Catholic school teachers to continue their service to K-12 schools through leadership formation in the Mary Ann Remick Leadership Program in the Alliance for Catholic Education (ACE). All program candidates are provided with regular opportunities to interact with a national community of scholars and experts in the field of Catholic education. Candidates will be eligible for Indiana state licensure upon completion of the program, which includes the Pearson School Administrator-Building Level Assessment.

The Mary Ann Remick Leadership Program is designed to prepare candidates to become school leaders and meet the professional standards as defined by the Indiana Department of Education Rules for Educator Preparation and Accountability (REPA), aligned with the National Education Leadership Preparation (NELP) standards. The program is standards-based, and all course activities and requirements are designed with this in mind.

MAEL candidates take a total of 44 credit hours of coursework, completed over a 25-month span. Candidates are required to maintain an overall grade point of at least 3.0 while enrolled in the program. Courses begin in the

## EDUCATION

summer, where 10 credits are taken during the first and second summer sessions, and 4 credits are taken during the final summer session. For specific details regarding course requirements, consult the program handbook.

During the academic years between the first two summer sessions, each candidate returns to the K-12 school at which he or she has been accepted as a leadership intern and serves as a full-time teacher-administrator during the regular school year. In addition to his or her duties with the school, the candidate participates in distance learning courses directed at further development of integrated leadership and applied practice encompassing instructional leadership, executive management, and school culture development. Throughout the two school years, faculty, executive coaches, and program directors provide online support and occasional site visits.

## The Master of Education

Degree Requirements	
GPA	38 credits
Credits	42 credits (elementary focus)
Total Credits	38 credits 42 credits (elementary focus)
Other	Supervised teaching
	Teaching portfolio

The master of education (M.Ed.) in teaching program is available only to candidates enrolled in the Alliance for Catholic Education's Teaching Fellows program. Candidates in this program work toward licensure, consistent with the standards in the state of Indiana in each of the following developmental levels: elementary (K-6), middle school (5-9), and secondary (5-12). The content areas within the middle school and secondary levels include English language arts, social studies, science,

mathematics, and foreign languages. Like most accredited teacher education programs at the master's level, content-area courses must be completed before entering the master's program, resulting in education pedagogical coursework as the focus of this programming.

A total of 38 credit hours of letter-graded coursework (42 for elementary) and teaching experience are required, with an overall grade point of at least 3.0. Half of the coursework occurs in two summer sessions with 11 to 13 credits earned in each. For specific details regarding course requirements, consult the program handbook.

M.Ed. candidates must complete two years of service in teaching and earn grades of 3.0 or higher in the supervised teaching courses. The teaching portfolio is evaluated by both University faculty and master teachers, who provide recommendations for continued development. Candidates acquire teaching practice both in South Bend-area elementary and secondary schools and at an assigned Catholic school in the United States. Throughout the two years, supervision is accomplished by measuring candidate performance against professional performance indicators while candidates build a teaching portfolio documenting their progress in developing as a teacher.

## Non-Degree Licensure Programs

### Program for Inclusive Education

The Program for Inclusive Education (PIE) equips Catholic schools with the culture, foundation, and resources to educate all students inclusively while celebrating every student's diverse and exceptional characteristics.

With a hybrid on-campus/online module structure, the program offers an 18-credit hour teacher-leader formation program with deep expertise in educating and advocating for struggling learners and those with disabilities. Participants must be an educator in a Catholic school to be considered for admission for the formation program. All educators — including those from public, charter, and non-Catholic private schools — are welcome to take individual courses or participate in the online professional development modules.

Completion of the program provides the opportunity for additional licensure in Exceptionalities: Mild Intervention, which is reciprocal with most states' commensurate license (i.e., serving high incidence disabilities). Candidates may work with the Office of Professional Standards at Notre Dame to identify comparable licenses in their home states.

### English as a New Language

The English as a New Language (ENL) program helps schools and teachers develop a deep understanding of the process of language acquisition, employ research-based instructional strategies, and cultivate culturally sustaining classrooms.

Students in this program complete 18 graduate credit hours over three terms: two on-campus courses during the summer session, followed by online modules in the fall and spring semesters so educators can return to their classrooms during the academic year. Professional development options in the form of on-campus summer workshops and online modules complement the academic programming.

The ENL program's coursework leads to licensure in English Language Learners in Indiana, which is reciprocal with most states' ESL/ESOL

licenses. Students may work with the Office of Professional Standards at Notre Dame to identify comparable licenses in their home states.

## POLITICAL SCIENCE

### Chair:

David Campbell

### Director of Graduate Studies:

Jeffrey Harden

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The primary aim of the graduate program in political science is to train qualified candidates for research and teaching. The department offers five major subfields for the master of arts (M.A.) and doctor of philosophy (Ph.D.) degrees: American politics, comparative politics, constitutional studies, international relations, and political theory. Political science also features a minor subfield in methodology that students can study in addition to their major subfield requirements.

### The Master of Arts

Degree Requirements	
GPA Credits	30 credits
Total Credits	30 credits
Other	Candidacy examinations

The Political Science Department does not normally admit students to the

master of arts program; however, students do have the option to complete the requirements for a non-research M.A. degree along the way to the Ph.D.

To obtain the non-research M.A., students must complete a minimum of 30 hours in course credits and must pass a comprehensive written examination in their major field. A minimum of 12 hours of coursework is required in the major field, and a minimum of nine in a second field.

### The Doctor of Philosophy

Degree Requirements	
GPA Credits	42 credits
Total Credits	60 credits
Other	Candidacy examinations
	Foreign language requirement
	Journal article submissions (two)
	Doctoral dissertation

Ph.D. students are expected to complete at least 42 credit hours of coursework. For specific course and seminar requirements, consult the program handbook.

In addition, political science candidates must successfully pass a reading exam in one foreign language or two additional courses in quantitative methods (ESL students are exempted), and are expected to submit two papers to scholarly journals. A major grant application may substitute for one submission.

During their time in residency, students should expect to provide six semesters of service to the program, usually as a teaching assistant.

To complete the degree requirements, each student must defend and submit a doctoral dissertation.

### Tenured and Tenure-Track Faculty

Christina Bambrick, Assistant Professor

Sotirios Barber, Professor

Jaimie Bleck, Associate Professor

Eileen Hunt Botting, Professor

David Campbell, Packey J. Dee Professor of American Democracy and Chair

Susan Collins, Associate Professor

Michael Coppedge, Professor

David Cortez, Assistant Professor

Darren Davis, Professor

Patrick Deneen, Professor

Michael C. Desch, Packey J. Dee Professor of Political Science

Rev. Robert Dowd, C.S.C., Associate Professor

Amitava Krishna Dutt, Professor

Luis Ricardo Fraga, Rev. Donald P. McNeill, C.S.C., Professor of Transformative Latino Leadership and Joseph and Elizabeth Robbie Professor of Political Science

Eugene Gholz, Associate Professor

Gary Goertz, Professor

Andrew Gould, Associate Professor

Matthew Hall, Associate Professor

Jeffrey Harden, Andrew J. McKenna Family Associate Professor and Director of Graduate Studies

Michael Hoffman, Assistant Professor  
Victoria Tin-bor Hui, Associate Professor

Debra Javeline, Associate Professor  
Rosemary A. Kelanic, Assistant Professor

Mary M. Keys, Associate Professor  
Karrie J. Koesel, Associate Professor

Geoffrey C. Layman, Professor  
Dan Lindley, Associate Professor

Scott Mainwaring, Eugene and Helen  
Conley Professor of Political Science

A. James McAdams, William M.  
Scholl Professor of International  
Affairs

Vincent Phillip Munoz, Tocqueville  
Associate Professor of Religion and  
Public Life

Joseph Parent, Professor

Aníbal Pérez-Liñán, Professor

Daniel Philpott, Professor

Dianne Pinderhughes, Professor

Emilia Justyna Powell, Associate Professor

Benjamin Radcliff, Professor

Ricardo Ramírez, Associate Professor

Sebastian Rosato, Associate Professor

Luis Schiumerini, Assistant Professor

Rev. Timothy R. Scully, C.S.C., Professor

Jazmin Sierra, Assistant Professor

Guillermo Trejo, Associate Professor

Ernesto Verdeja, Associate Professor

Dana Villa, Packey J. Dee Professor of  
Political Science

Susanne Wengle, Assistant Professor

Christina Wolbrecht, Professor

## PSYCHOLOGY

### Chair:

Cindy Bergeman

### Director of Graduate Studies:

Kathleen Eberhard

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The graduate program in psychology is divided into four doctoral graduate program areas: cognition, brain, and behavior; clinical; developmental; and quantitative. The clinical program is accredited by the American Psychological Association (APA).

The graduate program in psychology is primarily oriented toward the doctoral degree and consists of two stages: the master of arts, and the doctor of philosophy.

## The Master of Arts

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Candidacy examinations
	Master's thesis

The master of arts requires a minimum of 24 hours of graded coursework, and the completion and defense of a research-based master's thesis.

For specific course requirements, consult the program's handbook.

## The Doctor of Philosophy

Degree Requirements	
GPA Credits	26 credits
Total Credits	60 credits
Other	Candidacy examinations
	Practicum (as appropriate)
	Doctoral dissertation
	Internship (clinical area)

Students are expected to complete 60 or more credit hours, and may be required to complete a practicum when appropriate. The written and oral doctoral candidacy examinations are ordinarily completed during the third or fourth year.

To complete the requirements for the Ph.D., students must defend and submit a doctoral dissertation. In the clinical area, students also are required to complete an internship.

For additional details regarding courses and area-specific requirements, consult the program and area's graduate requirements documents.

## Tenured and Tenure-Track Faculty

### Clinical Area

Brooke Ammerman, Assistant Professor

## PSYCHOLOGY ~ SOCIOLOGY

Lee Anna Clark, William J. and Dorothy K. O'Neill Professor in Psychology; Director of the Clinical Area

E. Mark Cummings, William J. Shaw Center for Children and Families Professor; Fellow of the Joan B. Kroc Institute for International Peace Studies

Gerald J. Haefffel, Associate Professor

Jennifer Hames, Clinical Assistant Professor; Director of Clinical Services of the Notre Dame Psychological Services Center

Thomas V. Merluzzi, Professor

Laura Miller-Graff, William J. Shaw Center for Children and Families Assistant Professor; Assistant Professor of Peace Studies

Jessica Payne, Associate Professor; Nancy O'Neill Collegiate Chair in Psychology

David A. Smith, Professor

Nina Stoeckel, Practicum Director

Kristin Valentino, Professor; William J. Shaw Center for Children and Families Professor; Director of William J. Shaw Center for Children and Families

David Watson, Andrew J. McKenna Family Professor of Psychology

### Cognition, Brain, and Behavior Area

James R. Brockmole, Professor; Associate Dean for the Social Sciences and Research; Joseph and Elizabeth Robbie Collegiate Chair

Laura A. Carlson, Professor; Vice President and Associate Provost; Dean of the Graduate School

Kathleen M. Eberhard, Associate Professor

Bradley S. Gibson, Professor; Co-Chair Neuroscience and Behavior Major; Director of Graduate Studies

Joshua Koen, Assistant Professor

Nicole M. McNeil, Alliance for Catholic Education Professor of Psychology; Director of Education, Schooling, and Society

Jessica Payne, Associate Professor; Nancy O'Neill Collegiate Chair in Psychology; Director of the Cognition, Brain, and Behavior Area

Gabriel A. Radvansky, Professor

Nathan Rose, Assistant Professor; William P. and Hazel B. White Collegiate Chair

### Developmental Area

Cindy S. Bergeman, Professor; Department Chair

E. Mark Cummings, William J. Shaw Center for Children and Families Professor; Fellow of the Joan B. Kroc Institute for International Peace Studies

Dawn M. Gondoli, Professor; William J. Shaw Center for Children and Families Professor; Fellow of the Kroc Institute for International Peace Studies

Daniel K. Lapsley, Alliance for Catholic Education Professor of Psychology; Director of the Developmental Area

Kristin Valentino, Professor; William J. Shaw Center for Children and Families Professor; Director of William J. Shaw Center for Children and Families

### Quantitative Area

Ying (Alison) Cheng, Professor

Ross Jacobucci, Assistant Professor

Lijuan (Peggy) Wang, Professor; Director of the Quantitative Area

Ke-Hai Yuan, Professor

Guangjian Zhang, Associate Professor

Zhiyong (Johnny) Zhang, Professor

## SOCIOLOGY

### Chair:

William Carbonaro

### Director of Graduate Studies:

Terence McDonnell

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Web: <http://sociology.nd.edu/>

## The Master of Arts

Degree Requirements	
GPA Credits	24 credits
Total Credits	30 credits
Other	Candidacy examinations
	Master's thesis

The master of arts (M.A.) degree requires 30 total hours of credit, of which six credit hours may be earned for the master's thesis. All students must complete and defend a research thesis for the master's degree.

For specific details regarding course and candidacy requirements, consult the program handbook.



## SOCIOLOGY

**The Doctor of Philosophy**

Degree Requirements	
GPA Credits	39 credits
Total Credits	60 credits
Other	Candidacy examinations
	Doctoral dissertation

The doctoral program normally occupies six years of full-time work for students with the bachelor's degree. Core requirements must be fulfilled in the first three years, according to scheduled sequencing. It is expected that the student will have completed all but the dissertation requirement by the conclusion of the fourth year of graduate study.

To fulfill the training and research requirements, each candidate must select two specialty areas and pass a comprehensive examination in each.

**Tenured and Tenure-Track Faculty**

Mark Berends, Professor and Director of the Center for Research on Educational Opportunity

Kraig Beyerlein, Associate Professor and Director of the Center for the Study of Religion and Society

William J. Carbonaro, Professor and Department Chair

Kevin J. Christiano, Associate Professor

David Gibson, Associate Professor

David S. Hachen, Jr., Associate Professor and Co-Director of the Interdisciplinary Center for Network Science and Applications

Tamara Kay, Associate Professor

Amy Langenkamp, Associate Professor

Ricardo Martinez-Schuldt, Assistant Professor

Elizabeth McClintock, Associate Professor

Erin McDonnell, Assistant Professor

Terence McDonnell, Associate Professor and Director of Graduate Studies

Rory M. McVeigh, Professor and Director of the Center for the Study of Social Movements

Joel Mittleman, Assistant Professor

Anne Mische, Associate Professor

Sarah Mustillo, Professor and Dean of College of Arts and Letters

Abigail Ocobock, Assistant Professor

Atalia Omer, Associate Professor

David Sikkink, Associate Professor

Christian Smith, Professor

Lynette Spillman, Professor

Jason Springs, Associate Professor

Erika M. Summers-Effler, Associate Professor

J. Samuel Valenzuela, Professor

Richard Williams, Associate Professor

Calvin Zimmerman, Assistant Professor

# KEOUGH SCHOOL FOR GLOBAL AFFAIRS

## GLOBAL AFFAIRS

### Chair:

Caroline Hughes

### Associate Director of the Master's Program:

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## The Master of Global Affairs

Degree Requirements	
GPA Credits	36 credits
Total	46 credits
Other	Foreign language requirement
	Option 1: Field experience (2 months) and 3-semester Integration Lab; or
	Option 2: Field experience (5 months) and capstone paper; or
	Option 3: Master's thesis

The interdisciplinary master of global affairs (MGA) degree program aims to prepare students to become skilled and effective leaders and agents of change

in careers in government, non governmental and civil society organizations, and the private sector.

Students are expected to complete 46 credits of coursework in pursuit of the MGA, and must select a concentration: international peace studies; sustainable development; or global affairs + [specialization]. All students are required to take core coursework as well as participate in a field experience.

The field experience is a key component of the MGA curriculum, allowing students to integrate theories learned in their coursework with the experience of partnering with an organization working to address global challenges. Typically students participate in a field experience based on their concentration. Students in the peace studies concentration participate in the six-month field experience in their third semester, which culminates in a capstone paper in their fourth semester. Students in the sustainable development and global affairs concentrations participate in the integration lab (iLab), which includes coursework in the first, second, and third semesters, and a two-month summer field experience.

A small number of students may be approved to write a master's thesis instead of pursuing a field experience. These students remain on campus during both academic years and research and write a thesis under the supervision of a thesis director in their second year.

For additional details regarding course, examination, and service requirements, consult the program handbook.

## Tenured and Tenure-Track Faculty

Ellis Adams, Assistant Professor of Geography and Environmental Policy

R. Scott Appleby, Marilyn Keough Dean; Professor of History

Ted Beatty, Professor of History

Ashley Bohrer, Assistant Professor of Gender and Peace Studies

Catherine Bolten, Associate Professor of Anthropology and Peace Studies

Paolo Carozza, Professor of Law; Director, Kellogg Institute for International Studies

Abby Córdova, Associate Professor of Global Affairs

Diane Desierto, Associate Professor of Human Rights Law and Global Affairs

Joshua Eisenman, Associate Professor of Global Affairs

Alejandro Estefan Dávila, Assistant Professor of Developmental Economics

Gary Goertz, Professor of Political Science and Peace Studies

Patrick Griffin, Madden-Hennebry Professor of History; Director, Keough-Naughton Institute for Irish Studies

Rev. Daniel Groody, C.S.C., Associate Professor of Theology and Global Affairs; Vice President and Associate Provost; Director, Kellogg Global Leadership Program

Michel Hockx, Professor of Chinese Literature; Director, Liu Institute for Asia and Asian Studies

Caroline Hughes, Rev. Theodore M. Hesburgh, C.S.C., Chair in Peace Studies; Interim Associate Dean for Academic Affairs

Lakshmi Iyer, Associate Professor of Economics and Global Affairs;

Kyle Jaros, Associate Professor of Global Affairs

Emmanuel Katongole, Professor of Theology and Peace Studies

Asher Kaufman, Professor of History and Peace Studies; Regan Director of the Kroc Institute for International Peace Studies

Tamara Kay, Associate Professor of Global Affairs and Sociology

Tracy Kijewski-Correa, Leo E. and Patti Ruth Linbeck Collegiate Chair and Associate Professor, Department of Civil and Environmental Engineering and Earth Sciences; Associate Professor of Global Affairs; Co-Director, Integration Lab

Julia Kowalski, Assistant Professor of Global Affairs

Jennifer Mason McAward, Associate Professor of Law; Director, Klau Center for Civil and Human Rights

Laura Miller-Graff, Associate Professor of Psychology and Peace Studies

Ann Mische, Associate Professor of Sociology and Peace Studies

Ebrahim Moosa, Mirza Family Professor of Islamic Thought and Muslim Studies

Thomas Mustillo, Associate Professor of Global Affairs; Director, Global Affairs + Specialization Concentration, Master of Global Affairs

Atalia Omer, Professor of Religion, Conflict, and Peace Studies

Susan Ostermann, Assistant Professor of Global Affairs

Aníbal Pérez-Liñán, Professor of Political Science and Global Affairs

Patrizio Piraino, Associate Professor of Education, Labor and Development; Director, Sustainable Development Concentration, Master of Global Affairs

Clemens Sedmak, Professor of Social Ethics; Interim Director, Nanovic Institute for European Studies

Jason A. Springs, Professor of Religion, Ethics and Peace Studies

Rachel Sweet, Assistant Professor of Politics and Global Affairs

Ernesto Verdeja, Associate Professor of Political Science and Peace Studies

Paul Winters, Keough-Hesburgh Professor of Global Affairs

Sharon Yoon, Assistant Professor of Korean Studies

## PEACE STUDIES

### Director of the Joan B. Kroc Institute for International Peace Studies:

Asher Kaufman

### Director of Doctoral Studies:

Catherine Bolten

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## The Doctor of Philosophy

The Kroc Institute for International Peace Studies within the Keough School of Global Affairs at the University of Notre Dame offers a Ph.D. in peace studies in partnership with the departments of anthropology, history, political science, psychology, sociology, and theology. This program grows out of an acute awareness of the need for more rigorous interdisciplinary study of peace and war and for deeper understanding of how peacebuilding can effectively address political, ethnic, and religious violence throughout the world. Graduates of the Kroc Institute program in peace studies are fully credentialed in one of the six associated disciplines, and are fully acquainted with the research questions and findings of interdisciplinary peace research.

## Ph.D. in Peace Studies and Anthropology

Degree Requirements	
GPA Credits	42 credits
Total Credits	60 credits
Other	Foreign language requirement

## PEACE STUDIES

Degree Requirements	
	Comprehensive examination
	Dissertation prospectus defense
	Doctoral dissertation

The Ph.D. in peace studies and anthropology typically requires a minimum of 24 hours of letter-graded course credits in anthropology, and 18 credits of the same in peace studies.

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English and one other language;
- Submit application(s) for external funding for scholarly research;
- Complete at least five semesters of research and teaching in anthropology and peace studies, including "Introduction to Peace Studies";
- Submit at least one article for external peer review; and
- Defend and submit to the Graduate School a dissertation of original research.

The combined comprehensive examination in peace studies and anthropology is normally completed during the student's fifth semester. The exam consists of two parts, written and oral, with the oral occurring within 10 days of successful passage of the written portion.

Examiners should be members of the Department of Anthropology tenured and tenure-track faculty and Kroc Institute core faculty.

At least half of a candidate's dissertation committee must be core Kroc

Institute faculty or Kroc Institute faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student manual and the graduate student handbook for the Department of Anthropology.

### Ph.D. in Peace Studies and History

Degree Requirements	
GPA	48 credits
Credits	
Total	60 credits
Other	Foreign language requirement
	Comprehensive examination (peace studies)
	Comprehensive examination (history)
	Dissertation proposal defense
	Doctoral dissertation

The Ph.D. in peace studies and history typically requires a minimum of 30 letter-graded course credits in history, and 18 credits of the same in peace studies.

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English and one or two other language(s), depending on the specialty in history;
- Submit application(s) for external funding for scholarly research;
- Complete at least five semesters of research and teaching in history and peace studies, including "Introduction to Peace Studies";
- Submit at least one article for external peer review; and

- Defend and submit to the Graduate School a dissertation of original research.

Students in the peace studies and history program complete separate comprehensive exams in peace studies and in history. Each set of exams includes both a written component and an oral component, with the oral occurring within 10 days of the completion of the written portion.

All comprehensive examiners in peace studies must be core Kroc Institute faculty or Kroc faculty fellows.

At least half of a candidate's dissertation committee must consist of core Kroc Institute faculty or Kroc faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student manual and the graduate student handbook for the Department of History.

### Ph.D. in Peace Studies and Political Science

Degree Requirements	
GPA	51 credits
Credits	
Total	60 credits
Other	Foreign language requirement
	Comprehensive examination (peace studies)
	Comprehensive examination (political science)
	Dissertation proposal defense
	Doctoral dissertation

The Ph.D. in peace studies and political science typically requires a minimum of 33 letter-graded course credits in political science, and 18 credits of the same in peace studies.

## PEACE STUDIES

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English and at least one other language;
- Submit application(s) for external funding for scholarly research;
- Complete at least five semesters of research and teaching in political science and peace studies, including "Introduction to Peace Studies";
- Submit at least one article for external peer review; and
- Defend and submit to the Graduate School a dissertation of original research.

Students in the peace studies and political science program complete separate comprehensive exams in peace studies and in their primary field in political science. The peace studies exam includes both a written component and an oral component, with the oral occurring within 10 days of the completion of the written portion.

All comprehensive examiners in peace studies must be core Kroc Institute faculty or Kroc faculty fellows.

At least half of a candidate's dissertation committee must consist of core Kroc Institute faculty or Kroc faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student manual and the graduate student handbook for the Department of Political Science.

### Ph.D. in Peace Studies and Psychology

Degree Requirements	
GPA	60 credits (clinical)
Credits	44 credits (developmental)
Total Credits	60 credits
Other	Foreign language requirement
	Comprehensive examination (peace studies)
	Preliminary examination (psychology)
	Master's thesis
	Internship (clinical)
	Dissertation proposal defense
	Doctoral dissertation

The Ph.D. in peace studies and psychology typically requires a minimum of 42 letter-graded course credits in psychology (clinical) or 26 letter-graded course credits in psychology (developmental), and 18 credits of the same in peace studies.

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English and at least one other language;
- Submit application(s) for external funding for scholarly research;
- Complete all requirements for the master of arts degree;
- Complete at least one year of psychology laboratory work and two semesters as a teaching assistant, including one semester as a TA in "Introduction to Peace Studies";
- Complete both a practicum and an internship as appropriate (clinical psychology track);

- Submit at least one article for external peer review; and
- Defend and submit to the Graduate School a dissertation of original research.

Students in the peace studies and psychology program complete one set of comprehensive exams in peace studies and the preliminary examinations in psychology. The peace studies exam includes both a written component and an oral component, with the oral occurring within 10 days of the completion of the written portion.

All comprehensive examiners in peace studies must be core Kroc Institute faculty or Kroc faculty fellows.

At least half of a candidate's dissertation committee must consist of core Kroc Institute faculty or Kroc faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student manual and the graduate student handbook for the Department of Psychology.

### Ph.D. in Peace Studies and Sociology

Degree Requirements	
GPA	51 credits
Credits	
Total Credits	66 credits
Other	Foreign language requirement
	Comprehensive examination (peace studies)
	Comprehensive examination (sociology)
	Master's thesis
	Dissertation proposal defense
	Doctoral dissertation



## PEACE STUDIES

The Ph.D. in peace studies and sociology typically requires a minimum of 33 letter-graded course credits in psychology and 18 credits of the same in peace studies.

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English and at least one other language;
- Complete all requirements for the master of arts degree;
- Submit application(s) for external funding for scholarly research;
- Complete at least five semesters of research and teaching in sociology and peace studies, including "Introduction to Peace Studies";
- Submit at least one article for external peer review; and
- Defend and submit to the Graduate School a dissertation of original research.

Students in the peace studies and sociology program complete separate comprehensive exams in peace studies and in sociology. The peace studies exam includes both a written component and an oral component, with the oral occurring within 10 days of the completion of the written portion.

All comprehensive examiners in peace studies must be core Kroc Institute faculty or Kroc faculty fellows.

At least half of a candidate's dissertation committee must consist of core Kroc Institute faculty or Kroc faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student

manual and the graduate student handbook for the Department of Sociology.

### Ph.D. in Peace Studies and Theology

Degree Requirements	
GPA Credits	42 credits
Total	60 credits
Other	Foreign language requirement
	Comprehensive examination (peace studies)
	Comprehensive examination (theology)
	Dissertation proposal defense
	Doctoral dissertation

The Ph.D. in peace studies and theology typically requires a minimum of 24 letter-graded course credits in theology and 18 credits of the same in peace studies.

In addition to the required credit hours, students in this program are expected to:

- Demonstrate documented proficiency in English, two modern languages, and one classical language;
- Submit application(s) for external funding for scholarly research;
- Complete at least five semesters of research and teaching in theology and peace studies, including "Introduction to Peace Studies";
- Submit at least one article for external peer review; and

- Defend and submit to the Graduate School a dissertation of original research.

Students in the peace studies and theology program complete separate comprehensive exams in peace studies and in theology. The peace studies exam includes both a written component and an oral component, with the oral occurring within 10 days of the completion of the written portion.

All comprehensive examiners in peace studies must be core Kroc Institute faculty or Kroc faculty fellows.

At least half of a candidate's dissertation committee must consist of core Kroc Institute faculty or Kroc faculty fellows.

For additional details regarding course, examination, and service requirements, please consult the Kroc Ph.D. student manual and the graduate student handbook for the Department of Theology.

### Tenured and Tenure-Track Faculty

Ashley Bohrer, Assistant Professor of Gender and Peace Studies

Catherine Bolten, Associate Professor of Anthropology and Peace Studies; Director of Doctoral Studies

Gary Goertz, Professor of Political Science and Peace Studies

Caroline Hughes, Rev. Theodore M. Hesburgh, C.S.C., Chair in Peace Studies; Interim Associate Dean of Academic Affairs, Keough School of Global Affairs

Emmanuel Katongole, Professor of Theology and Peace Studies

Asher Kaufman, Professor of History and Peace Studies; John M. Regan,

## PEACE STUDIES

Jr., Director, Kroc Institute for International Peace Studies	Conflict, Transformation and Peace-building
George Lopez, Rev. Theodore M. Hesburgh, C.S.C., Professor Emeritus of Peace Studies	Madhav Joshi, Associate Research Professor; Associate Director, Peace Accords Matrix
Laura Miller-Graff, Associate Professor of Psychology and Peace Studies; Director of Undergraduate Studies	Mahan Mirza, Executive Director, Ansari Institute for Global Engagement with Religion
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- Anne Hayner, Associate Advising Professor; Associate Director for Alumni Relations, Kroc Institute for International Peace Studies
- David Anderson Hooker, Associate Professor of the Practice of Con-

# APPENDIX: GRADUATE SCHOOL POLICIES (FULL TEXT)

## ACCOMMODATIONS FOR STUDENTS AFFECTED BY COVID-19

Students enrolled during the spring 2020 semester who experienced disruption to their academic progress during the COVID-19 pandemic are eligible for the following accommodations to policies within the Academic Code of the Graduate School.

Changes from the original policy are indicated where text is underlined.

### Incomplete Coursework

Original policy: “Incomplete Coursework” on page 26. This applies to all Graduate School master’s and doctoral students.

A grade of “Incomplete” (I) should be given only in exceptional circumstances and only for compelling reasons. When a student receives a grade of I, he or she has 60 calendar days from when grades were due (for the semester in which the I was given) to complete the coursework. The instructor of record then has 14 calendar days to report the grade. If the coursework is not completed by this date, the grade of I will be changed permanently to a grade of F. Extensions for Incompletes require formal approval from the associate dean for academic affairs in the Graduate School. The associate dean reserves the right to seek appropriate

documentation from the Sara Bea Accessibility Services Office if a request for an extension beyond the usual 60 calendar days is made for mental or physical health reasons.

### Leave of Absence

Original policy: “Leave of Absence” on page 27. This applies to all Graduate School master’s and doctoral students.

For exceptional reasons and on the recommendation of the program, a student in good academic standing may request a leave of absence for a maximum of three consecutive semesters. A request for a leave of absence can be made for study, athletic training, military, mission work, medical, and personal reasons. A request for a leave of absence must be made before the first class day of the semester in which the leave is requested, and be approved by the Graduate School. If, for some urgent reason a student chooses to leave the University after the beginning of the semester, the student must officially withdraw from the University (see “Withdrawal from the Program” on page 27). If the student does not return at the end of the leave of absence period, he or she is no longer considered a student at Notre Dame and must go through the readmission process if he or she decides to return.

In the case of a medical leave of absence, the Graduate School may require a recommendation from the

University Health Center or University Counseling Center regarding the student’s readiness to resume academic work prior to readmission.

### Medical Separation from Academic Duties

Original policy: “Medical Separation from Academic Duties” on page 27. This applies to all Graduate School master’s and doctoral students.

Students enrolled in the Graduate School who wish to temporarily interrupt their programs for medical reasons must make an official request to the Graduate School. Students are eligible under this policy if they, their spouse, or their dependent(s) have a “serious medical condition.” For purposes of this policy, “serious medical condition” is defined as a medical condition that (1) requires a multiple-day hospitalization OR (2) renders the student unable to engage in coursework and all other Graduate School-related duties for a period of at least ten (10) calendar days. Written certification by a physician that the student, their spouse, or their dependent(s) has a serious medical condition as defined in this policy must be submitted to the Graduate School as soon as the need arises (for emergency requests). In situations involving childbirth or adoption, see “Childbirth and Adoption Accommodation Policy” on page 27. In all cases, regardless of the

nature of the medical condition, the duration of the separation will be as certified by the physician up to a maximum of six weeks. Students may utilize this medical separation policy two times during their graduate studies. Should students need more than six weeks at any one time, they must withdraw from the University. The Graduate School approves leaves of absence for one or more semesters for medical or other reasons (see “Leave of Absence” on page 27).

## Probation Initiated by the Graduate School

Original policy: “Probation Initiated by the Graduate School” on page 28. This applies to all Graduate School Ph.D. students.

In addition to the probation letter initiated by the student’s program of study, there are three ways in which the Graduate School may place a student on probation. These are:

1. A cumulative grade point average below 3.0 in any two semesters;
2. A failure to pass candidacy exams by the end of the ninth semester;
3. Earning a U in research for two consecutive semesters.

Students who are placed on probation by the Graduate School will receive an official letter from the associate dean for academic affairs in the Graduate School informing them of their status change.

## Time Limit (Doctor of Philosophy Degree)

Original policy: “Time Limit” on page 32. This applies to all Graduate School Ph.D. students.

The student must fulfill all doctoral requirements, including the dissertation, its defense, and the official submission within nine years from the time of matriculation, unless interrupted by approved medical leave(s) and/or approved childbirth accommodation(s). Failure to complete any of the Graduate School or program requirements within the prescribed period results in forfeiture of degree eligibility.

If, after the time limit expires, a student has not fulfilled all doctoral requirements, he or she may apply for dissertation completion status for up to two semesters. Students who are granted this status are considered part-time and must register each semester for the equivalent of one credit hour of resident tuition, payable by the student.

## APPEAL PROCEDURE FOR GRADUATE STUDENTS

The purpose of this procedure is to afford graduate students at the University of Notre Dame the opportunity to resolve complaints dealing with academic issues and other program decisions that terminate or impede progress toward the degree, such as dismissal from graduate standing, placement on probationary status, and denial of readmission to the same program (if the student was previously in good standing).

This procedure is not to be used to address issues of sexual or discriminatory harassment (see grievance procedure

available through the Office of Institutional Equity), of academic fraud (see “Academic Integrity” on page 29), or for disability-related grievances (see grievance procedure available through the Sara Bea Accessibility Services Office).

This procedure is provided for continuing and returning graduate students in the Graduate School. It is not to be used by applicants for admission or by students in the Mendoza College of Business, the Law School, or the School of Architecture.

## Program Resolution Process

Programs are required to develop a formal grievance procedure approved by the Graduate School. Graduate students must first attempt to resolve complaints at the lowest level, i.e., within the student’s program, according to grievance procedures specified in the program’s graduate student guide. If a graduate student believes that the program reached its decision resolving the student’s grievance in error, the student may appeal the decision to the Dean of the Graduate School, subject to and in accordance with Section 3 below.

## Formal Appeal Procedure to the Dean of the Graduate School

If a graduate student decides to formally appeal a program’s decision resolving the student’s grievance, the student must submit a written request for appeal to the Graduate School’s associate dean for academic affairs as set forth below. The only grounds upon which an appeal may be based are:

1. A procedural error within the program’s stated grievance

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procedure which may have substantially affected the fairness or outcome of the grievance procedure.

2. New evidence that becomes available only after the conclusion of the program's grievance procedure which reasonably may have impacted the fairness or outcome of the grievance procedure.
3. An inappropriate sanction which is grossly disproportionate to the conduct initiating the sanction, considering the relevant aggravating and/or mitigating factors.

Dissatisfaction or disagreement with a decision is not grounds for appeal.

The request for appeal must include the following information: (1) the graduate student's name, address, email address, and phone number; (2) relevant information from the program's grievance process (date of hearing, any written decision(s) from the program, and sanction(s)); (3) the ground(s) upon which the request for appeal is based; and (4) for each ground stated, an explanation of why the student's appeal meets that ground (e.g., identify specific procedures that were not followed during the grievance procedure, identify any evidence discovered following the conclusion of the grievance process, or explain why the sanction is not commensurate with the underlying conduct).

The request for appeal must be submitted to the Graduate School's associate dean for academic affairs within 30 calendar days of the program's decision. Only the Graduate School's associate dean for academic affairs may extend this deadline, at his or her sole discretion, in extenuating circumstances. If no request for appeal is submitted within the 30-day appeal period,

and no extension has been granted by the associate dean for academic affairs, then the program's decision becomes final and is not subject to appeal.

The associate dean for academic affairs will then convene a meeting of an ad hoc academic appeals committee, composed of three faculty members chosen by the associate dean for academic affairs, all of whom will be current members of their respective College Council. Two of the three faculty members on the appeals committee shall be from the appellant's college, and one shall be from outside the appellant's college, unless an appellant is enrolled in a trans-college program, in which case each college will be represented on this committee. The committee will also include one non-voting graduate student. This student may be either one of the current Graduate Student Union representatives or a substitute from the appellant's college selected by the associate dean for academic affairs from a pool of students identified by the Graduate Student Union. The associate dean for academic affairs, who does not vote, will chair the committee. At the appellant's request or by request of the committee, this appeals committee will also meet with the appellant. The committee may also meet with other individuals involved.

The appeals committee will make a written recommendation to the Dean of the Graduate School within 30 calendar days of receipt of the appeal. The Dean may or may not accept the committee's recommendation, but in either case, the Dean will issue a written decision to the appellant within 30 calendar days of receipt of the committee's recommendation. The Dean, at his or her sole discretion, in extenuating circumstances, may extend these 30-day deadlines. The Dean will send a copy of this decision letter to the department chair or the director of the

program. The judgment of the Dean of the Graduate School is final.

Students who have been dismissed from their program cannot register or complete the ND Roll Call process for subsequent semesters, including the summer session, during the appeal process.

## CHILDBIRTH AND ADOPTION ACCOMMODATION POLICY

### Rationale

The following policy is intended to assist graduate students who are new parents. It is a supplement, not an addition, to the six week medical separation policy. Unlike the medical separation policy that covers any medical condition, this accommodation policy addresses a single set of circumstances: new parenthood. The accommodation provides students with a semester (16 weeks) to adjust to new parenthood. It is not a leave of absence; it is an accommodation. Students maintain their standing as students and are eligible for financial support.

Departments are encouraged to work out specific arrangements with students, on a case-by-case basis, within the broad framework of this policy.

### Eligibility

All full-time students in good academic standing who are primary and full-time caregivers of a newborn child or a child less than 5 years old newly placed in the home are eligible.

In addition:



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- Students must have completed one semester and have been registered and enrolled for at least another semester prior to the request.
- Students may make use of the policy up to two times provided that at least one semester of full-time enrollment occurs between requests.
- Parents who are not the primary and full-time caregiver may apply for a leave of absence, but are not eligible for accommodation.

## Accommodation in Comparison to Leave

This accommodation is intended to provide relief from full-time responsibilities while providing continuing financial support. It differs from a leave of absence in three ways: responsibilities, eligibility clock, and funding.

### 1. Responsibilities

#### *Accommodation*

- Students are relieved of full-time graduate studies/duties (such as teaching and research).
- Students' official academic exam (e.g., oral candidacy exams, master's comprehensives, etc.) deadlines are extended for one semester.
- Students are relieved of coursework deadlines for one semester (16 weeks) during or immediately following the semester in which the birth or adoption oc-

curs.<sup>1</sup> The choice of the semester is the student's.<sup>2</sup>

- Students are expected to register and enroll full time and to remain engaged, if at a reduced level.

#### *Leave of Absence*

- Students are relieved of all responsibilities.
- If a student wishes to devote full-time care to a newborn or a newly adopted child, the student should request a leave of absence.

Departments are encouraged to be as flexible as possible with the student seeking accommodation. This student's assignments should allow for maximum flexibility in his/her schedule during the first 6 weeks after the child arrives. The amount of engagement and reduction in workload during the entire accommodation period (both prior to and after the birth or adoption of a child) should be specified in writing prior to the onset of the accommodation period. The notification section of this document outlines the process for requesting the accommodation.

### 2. Eligibility Clock

#### *Accommodation*

- Student's academic eligibility clock is extended by a semester, effectively adding a semester

1. Students may take incompletes in courses or take a reduced course load; however, students must register for at least 9 credit hours.

2. Students who are funded on a 12-month basis can choose to initiate this accommodation during the summer term. On the date this accommodation is initiated during the summer the 16 week "semester" will begin and then end during a point in the fall semester. Once the 16 week accommodation has been completed, the student will be expected to finish out the fall semester at a 100% workload. All official academic exam deadlines will be treated as if the student had been granted the accommodation in the fall semester

to the student's eligible time to meet all degree requirements. Stops the student's eligibility clock.

#### *Leave of Absence*

- Student still has eight years to fulfill all requirements and must meet all of the normal program and Graduate School deadlines.

### 3. Funding

#### *Accommodation*

- Student will remain eligible to receive financial support (see below) and the health insurance subsidy.

#### *Leave of Absence*

- Student will forego financial support from the University.

If, after the end of the accommodation period, the student wishes to have more time, he/she can apply for a leave of absence. The clock will stop, but so will funding. Students on leave may still enroll in the health insurance plan at their own expense.

### Funding

Students who are fully-funded and who have not yet completed their 5th year of study will continue to be supported financially. They will continue to receive a stipend at the same level for the length of the accommodation (see below for possible exceptions), receive a tuition scholarship, and receive the health insurance subsidy from the Graduate School. Terminal master's students, and students who have completed their 5th year of study, are eligible for the accommodation only, not for funding under this policy. Departments and advisors may provide funding in these cases if there are avail-

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able resources. Parental relief cannot be combined with other funding.

There are two important funding limits:

4. The total number of years of funding will not be extended
5. For students with 9 month stipends, funding is for the academic year only. For students with a 12 month stipend, funding is for the calendar year.

Students with special funding circumstances:

- Teaching assistants will be relieved of all teaching duties.<sup>3</sup> As stated above, they must continue to be intellectually engaged in the activities of the department and their research. Details of this engagement should be worked out in writing between the student and the department prior to the start of the accommodation.
- Students on research grants who wish to continue to receive full funding must follow the following guidelines. If the student is funded by a grant, the level of support is determined by the granting agency. If the student is expected to devote 50% or 75% of his/her former working hours to his/her research, the grant will pay 50% or 75% of her former stipend, assuming he/she works at full capacity during those reduced hours. The Graduate School will make up the difference between what the grant pays and the former stipend, up to 50% of the former stipend. If the grant funding is reduced below 50%, the Graduate School will still pay 50%.

Details of the final arrangement should be worked out in writing between the student and the department prior to the start of the accommodation.

- If a student is funded by an external fellowship, the level of support is determined by the foundation. If the fellowship is reduced or eliminated as a result of a new child, the Graduate School will fund up to 50% of the student's former stipend under the fellowship. Questions should be directed to the Graduate School.

### Notification

Eligible students must notify their advisor, director of graduate studies, and the associate dean of students in the Graduate School of their intent to use the accommodation policy at least 60 days prior to the expected date of childbirth or adoption. The Request for Childbirth and Adoption Accommodation form has been placed on the Graduate School website for this purpose.

The 2-page form collects the necessary information for the accommodation agreement, including:

- Eligibility requirements
- Student responsibilities and expectations during the accommodation
- Formula for special funding circumstances during accommodation

This agreement should then be approved and signed by the student, the student's advisor, the departmental DGS and the chair or the graduate studies committee, and sent to the associate dean of students in the Gradu-

ate School for review. In the event that the student and department cannot reach a decision about an appropriate workload, the associate dean of students in the Graduate School should be consulted. The details of the agreement may be re-assessed and revised after childbirth or adoption. Accommodated students should submit a brief written progress report to their advisors at the end of the accommodation period.

## POLICY FOR PREGNANT GRADUATE STUDENTS IN LABS

Exposure to certain chemicals, biological agents and radiation has proven harmful to fetuses, especially in the first three months. For those pregnant graduate students whose research requires them to be present in laboratories where there is a potential biological, chemical, or radiation risk to her unborn child, the Graduate School strongly recommends that they immediately inform their advisors of their pregnancy, and then contact the Office of Risk Management. This office is dedicated to providing professional advice in the areas of safety, occupational health, environmental protection and risk management. Safety professionals can advise the student (and the advisor) about the effects of harmful materials on the development of the fetus, particularly in the critical first three months, and recommend that the woman avoid the laboratory for a certain period of time.

3. Those students for whom serving as a TA is a requirement must fulfill the requirement in a later semester.

## STUDENT PROCEDURE OVERVIEWS

### Defense of the Doctoral Dissertation

The purpose of a dissertation defense is to offer the doctoral candidate an opportunity to support the claims, procedures, and results of the dissertation. The defense is the traditional instrument that enables the candidate to explore with the committee the dissertation's substantive and methodological force. In this way, the candidate and the committee confirm the candidate's scholarly grasp of the chosen research area and original contribution to knowledge.

Dissertation defenses will not be allowed to proceed until all reader's reports have been received in the Graduate School at least two business days before the defense takes place.

Prior to the defense, committees should review departmental regulations for the conduct of the exam, the process of the exam, and voting procedures. Before the exam begins, they should inform the candidate of the process of the defense. After completion of the examination, the candidate should be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting on whether that performance merits a passing or failing grade. On a board of three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the advisor.

In case of failure, the department chair, on the recommendation of a majority of the examiners, may authorize a retake of the defense if this is permitted by departmental regulations. An authorization for retake must be approved by the Graduate School. A second failure results in forfeiture of degree eligibility and is recorded on the candidate's permanent record.

A candidate has the right to appeal the result of the defense to the Dean of the Graduate School on procedural grounds only, not on its substance or on his/her performance. If a retake is granted, an outside monitor appointed by the Graduate School must be present.

### Oral Candidacy Examination

The oral candidacy examination may serve several purposes. In part, it tests the candidate's readiness for advanced research in the more specialized area(s) of his/her field. It may also be comprehensive. Successful passage indicates that, in the judgment of the committee, the candidate has an adequate knowledge of the basic literature, problems, and methods of his/her field to proceed to a dissertation. If the proposal defense is part of the oral exam, it should be a defense of a proposal and not of a completed dissertation.

Prior to the examination, committees should review departmental regulations for the conduct of the exam, the process of the exam, and voting procedures. Before the exam begins, they should inform the candidate of the process of the exam. After completion of the examination, the candidate should be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting on whether that performance merits a passing or failing grade. On a board of

three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the advisor.

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A candidate has the right to appeal the result of the exam to the Dean of the Graduate School on procedural grounds only, not on its substance or on his/her performance. If a retake is granted, an outside monitor appointed by the Graduate School must be present.

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