

2015–2016 BULLETIN OF INFORMATION

University of Notre Dame Graduate Programs and Policies

The University reserves the right to change its admission, registration, and graduation requirements as necessary. The course offerings and requirements of the University of Notre Dame are continually under examination and revisions are expected. This Bulletin of Information is not a contract; it merely presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will remain the same. Every effort will be made to provide advance information of any changes.

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UNIVERSITY OF
NOTRE DAME

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ACADEMIC CALENDAR 2015-2016

Fall Semester 2015

August

- 25: Classes begin;
-Mass—formal opening of school year

September

- 1: Last day for course changes

October

- 17: Midsemester break begins
- 26: Classes resume
- 30: Last day for course discontinuance

November

- 1: Application deadline for admission to the Graduate School for spring semester 2016
- 9: Dissertation and thesis formatting checks due
- 16: Registration for spring semester 2016 begins
- 25: Thanksgiving holiday begins
- 30: Classes resume
-Last day for master's examinations and Ph.D. dissertation defenses for graduation in January 2016

December

- 7: Last day for presenting completed theses and dissertations to the Graduate School for January 2016 graduation
- 10: Last class day
- 11: Reading days begin
- 14: Final examinations begin
- 21: All grades submitted through insideND by 3:45 p.m.

January

- 3: Official graduation date (no ceremony)

Spring Semester 2016

January

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

February

- 1: Last deadline for applying to the Graduate School for fall semester 2016 admission and financial aid (check <http://graduateschool.nd.edu> for individual program deadlines)

March

- 5: Midsemester break begins
- 14: Classes resume;
Dissertation and thesis formatting checks due
- 16: Registration for summer session 2016 begins
- 18: Last day for course discontinuance
- 25: Easter holiday begins
- 29: Classes resume

April

- 8: Last day for master's examinations and Ph.D. dissertation defenses for graduation in May 2016
- 11: Registration for fall semester 2016 begins
- 15: Last day for presenting completed theses and dissertations to the Graduate School for May 2016 graduation
- 27: Last class day
- 28: Reading days begin

May

- 2: Final examinations begin
- 9: All grades submitted through insideND by 3:45 p.m.
- 14: Official graduation date and Graduate School Commencement Ceremony

Summer Session 2016

June

- 13: Classes begin
- 20: Dissertation and thesis formatting checks due

July

- 11: Last day for master's examinations and Ph.D. dissertation defenses for graduation in August 2016
- 18: Last day for presenting completed theses and dissertations to the Graduate School for August 2016 graduation
- 22: Last class day
- 31: Official graduation date (no ceremony)

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Dean of the Graduate School*

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- Development
- Policy and program design

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- Dean's scheduling

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- Budgets – monitoring and administration

- External fellowship administration
- Fellowship stewardship
- Financial policies
- Operations manager
- Professional development and recruiting funds to programs

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- Academic counseling
- Administration of Graduate School policies
- Graduate student life
- Oversight of students' progress
- Oversight and coordination of graduate student professional development
- Student appeals

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- Graduate School recruitment
- Support departments and programs with their individual recruitment efforts and admissions
- Manage online application and recruitment system

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:

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- Assessment and strategic planning for Graduate Student Life

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- Graduate Career Services strategic leadership
- Campus stakeholder interface
- Employer and alumni relations and outreach
- Career and professional development

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- Developing career skills and capabilities
- Career programming and professional development
- Networking with alumni and employers

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- Career exploration and planning
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- Mentoring and development
- Career services
- Community development
- Policies and procedures for postdoctoral scholars

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- Produce appointment letters for postdoctoral scholars and other non-faculty research appointments

- 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 Scholars and academic hiring departments

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- M-Z: Creation of live student records
- M-Z: Disapproved/rejected applications
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UNIVERSITY POLICIES

Notice of Nondiscrimination

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

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 Rehabilitation Act of 1973. The Title IX and Section 504 coordinator may be contacted as follows:

Director
Office of Institutional Equity
100 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 other aspects of student life and behavior are described in *du Lac: A Guide to Student Life* (the student handbook), which is hosted online at <http://dulac.nd.edu/community-standards/standards>. The online handbook contains the codes, rules, regulations and policies which establish the official parameters for student life at Notre Dame. It is the students' responsibility to be aware of these expectations and conduct themselves accordingly as members of the Notre Dame community. All the codes, rules, regulations and policies, etc., are in effect for all Notre Dame students — undergraduate, graduate, and professional, full or part time, on and off campus. Responsible behavior is expected of Notre Dame students wherever they may be.

Questions regarding the handbook may be directed to duLac@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. The University publishes an annual report outlining security and fire safety information and crime statistics for campus. This document provides suggestions regarding crime prevention strategies and important policy information about emergency procedures, reporting of crimes, law enforcement services on campus, fire safety, 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 SafeWalk program and campus shuttle service. You may view the document on the web at: [http://ndsp.nd.edu/crime-](http://ndsp.nd.edu/crime-prevention-and-safety/yearly-security-firesafety-reports/)

[prevention-and-safety/yearly-security-firesafety-reports/](http://ndsp.nd.edu/crime-prevention-and-safety/yearly-security-firesafety-reports/). A printed copy of this brochure is available by sending an email request to ndsp@nd.edu or by writing to: Office of the Director, 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

Notre Dame is the world's pre-eminent Catholic research university, an institution with a superb faculty, top graduate programs, and a commitment to meaningful research, teaching and service — all of which combine to offer our graduate students an integrated and ever-widening set of resources that contribute to their formation as the next generation of academic and professional leaders. Students are supported on their path to success through strong faculty mentorship within their programs, a thriving interdisciplinary community of student peers, an advanced professional development program, and network of offices and personnel that focus on graduate student life outside of the classroom and laboratory.

The Graduate School: Then and Now

Located north of the city of South Bend, Indiana, the University of Notre Dame was founded in 1842 by the Rev. Edward F. Sorin, a priest of the Congregation of Holy Cross. The state of Indiana chartered the University by a special act of the legislature. Combining the style of the French “college” and the seminary where Father Sorin and his congregational fellows studied for the priesthood, Notre Dame began as both a secondary school and a four-year college offering the baccalaureate degree in the liberal arts. It soon adapted to the style and structure of

the typical nineteenth-century American university, introducing a science curriculum in 1865, the first American Catholic law school in 1869, an engineering college in 1873, the beginnings of a distinctive graduate program in the early 1900s, and a college of business in 1921. The North Central Association first accredited the University in 1913. Notre Dame first began to award advanced degrees in 1918; the Graduate School was instituted in 1944.

The mission of the Graduate School is to promote a graduate community that positions all scholars for success. We believe in a holistic training model, and provide services and opportunities that support the development of the mind, the body, and the spirit, with the goal of producing scholars who will serve as forces for good in the world. The Graduate School is led by the Dean of the Graduate School, who also holds the title of Vice President and Associate Provost. A team of Associate Deans and a dedicated staff work in partnership with the colleges and departments to administer the programs and resources to assist graduate students to achieve their highest potential. The Graduate School has four divisions — humanities, social sciences, science, and engineering — and includes over 30 departments and programs that offer master's or doctoral degrees. There are approximately 2,200 graduate students, from all fifty states and over 100 nations, and 220 postdoctoral fellows at Notre Dame.

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 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.

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The Graduate Student Union maintains offices at Room 217 in the LaFortune Student Center.

Email: lhesch@nd.edu

Telephone: (574) 631-6963

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

Graduate Degrees Granted

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

Master of Arts in the following fields:

- Anthropology
- Art History, Design, and Studio Art
- Classics
- Early Christian Studies
- Economics
- English
- French and Francophone Studies
- History
- History and Philosophy of Science
- Iberian and Latin American Studies
- Italian Studies
- Peace Studies
- Philosophy
- Political Science
- Psychology
- Sociology
- Theology

Master of Divinity

Master of Engineering (only with J.D.)

Master of Engineering in Mechanical Engineering

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 Global Health

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
- Chemistry
- Earth Sciences
- Mathematics
- Physics

Master of Theological Studies

Doctor of Musical Arts

Doctor of Philosophy in the following fields:

- Aerospace and Mechanical Engineering
- Anthropology
- Applied and Computational Mathematics and Statistics
- Biochemistry
- Bioengineering
- Biological Sciences
- Chemical Engineering
- Chemistry
- Civil and Environmental Engineering and Earth Sciences
- Computer Science and Engineering
- Economics
- Electrical Engineering
- English
- History
- History and Philosophy of Science
- Literature
- Mathematics
- Medieval Studies
- Peace Studies
- Philosophy
- Physics
- Political Science

Psychology

Sociology

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

Master of Science in the following fields:

- Applied and Computational Mathematics and Statistics
- Global Health
- Patent Law
- Engineering, Science, and Technology Entrepreneurship

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:

- Gender Studies
- History and Philosophy of Science
- Irish Studies
- Quantitative Psychology
- Screen Cultures

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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 Biofluid Mechanics
 Computational Mechanics
 Control Systems
 Flow Physics and Control
 Fluid Mechanics
 Manufacturing
 Materials Science
 Mechanical Systems and Design
 Orthopedics and Biomedical Devices
 Solid Mechanics and Materials
 Thermal Sciences
 Tissue Engineering

Anthropology

Anthropological Archaeology
 Biological Anthropology
 Linguistic Anthropology
 Social-Cultural Anthropology

Applied and Computational Mathematics and Statistics

Applied and Computational Mathematics
 Applied and Partial Differential Equations
 Applied Statistics
 Bayesian Modeling
 Bioinformatics
 Biostatistics
 Computational and Mathematical Biology
 Computational Finance
 Computational Mathematics

Computational Neuroscience
 Dynamical Systems
 Mathematical Modeling
 Multiscale Modeling
 Nonlinear Dynamics
 Nonlinear Partial Differential Equations
 Numerical Algebraic Geometry
 Numerical Analysis
 Numerical Solution of Partial Differential Equations
 Scientific and Parallel Computing
 Predictive Analytics
 Statistical Bioinformatics
 Statistics
 Stochastic Processes

Art, Art History, and Design*

Studio Art+
 Ceramics
 Painting
 Photography
 Printmaking
 Sculpture
 Art History*
 American
 Ancient
 Contemporary
 Medieval
 Modern European
 Renaissance and Baroque
 Design+
 Graphic Design
 Industrial Design

Biological Sciences

Animal Behavior
 Aquatic Biology
 Biochemistry
 Biogeochemistry
 Biotechnology
 Cancer Biology
 Cell and Molecular Biology
 Conservation Ecology
 Developmental Biology
 Disease Ecology
 Ecological Genetics
 Ecology
 Ecosystem Ecology
 Endocrinology
 Environmental Biology
 Environmental Microbiology

Evolutionary Biology
 Functional Morphology
 Genetics and Bioinformatics
 Genomics
 Immunology
 Medical Entomology and Vector Biology
 Microbial Pathogenesis
 Neurobiology
 Parasitology and Infectious Diseases
 Physiology
 Plant Science
 Population Biology
 Population Genetics
 Stem Cell Biology

Chemical and Biomolecular Engineering

Bioengineering
 Catalysis and Reaction Engineering
 Cellular and Tissue Engineering
 Drug Delivery
 Ionic Liquids
 Materials
 Medical Diagnostics
 Membranes
 Microfluidics and Nanofluidics
 Molecular Modeling
 Multiphase Flow
 Nanomaterials and Nanotechnology
 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

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Physical/Analytical Chemistry	Structural Reliability	Optoelectronics
Radiation Chemistry	Tall Buildings and Long-Span Bridges	Semiconductor Materials and Devices
Structural Biology	Water and Wastewater Treatment	Signal and Image Processing
Surface Science	Wind Engineering	Wireless Networks
Synthetic Chemistry	Classics*	English
Theoretical and Computational Chemistry	Classical Studies	African American
Civil and Environmental Engineering and Earth Sciences	Early Christian Studies	Creative Writing++
Actinide Material Science	Computer Science and Engineering	Drama
Aquatic Chemistry	Algorithms and Theory	Early American (to 1865)
Bioengineering	Artificial Intelligence, Human Machine Interaction, and Robotics	Irish Studies
Biological Treatment of Hazardous Waste	Bioinformatics, Computational Biology, and Human Health	Latino/a Studies
Coastal Engineering	Biometrics and Computer Vision	Literary Theory
Computational Fluid Mechanics	Complex Networks, Data Mining, and Machine Learning	Middle American (from the Civil War to 1930)
Climate Variability and Change Development Studies	Computer Architecture and Nanotechnology	Modern British
Dynamics of Offshore Structures	Digital Humanities	Novel
Earthquake Engineering	High Performance and Scientific Computing	Old and Middle English
Environmental Biotechnology	Natural Language Processing	Poetry
Environmental Engineering	Security and Cryptography	Post 1930 American Literature
Environmental Fluid Dynamics	Software Engineering and Software Systems	Prose Fiction
Environmental Microbiology	Wireless, Mobile and Embedded Systems	Renaissance
Environmental Mineralogy	Economics	Restoration and 18th Century
Environmental Nanoscience and Technology	Development Economics	Romantic and Victorian
Environmental Sensors	Environmental Economics	Entrepreneurship*
Finite Element Modeling	Industrial Organization	Global Health*
Fire Effects on Structures	International Economics	History
Groundwater and Surface Water Hydrology	Labor Economics	Latin American History
Geomicrobiology	Monetary and Macroeconomics	Medieval History
High and Low Temperature Geochemistry	Public Economics	Modern European History
Mantle Petrology	Education*	United States History
Materials Characterization and Durability	Educational Leadership	History and Philosophy of Science
Metabolic Engineering	Teaching	Analytic Philosophy of Science and Epistemology
Multiphase Flows	Electrical Engineering	History of Astronomy and Physics
Natural and Man-made Hazard Reduction	Communication Systems and Networking	History and Philosophy of Biology 1700 to 1980
Nuclear Forensics	Control Systems	History and Philosophy of Eco- nomics
Progressive Collapse of Structural Systems	Integrated Circuits	History and Philosophy of Math- ematics
Renewable Energy	Nano-biotechnology	History of the Philosophy of Sci- ence
Structural Dynamics	Nanoelectronics	Intellectual History of Science 1600 to 1950
Structural Engineering		Medieval Natural Philosophy and Medicine
Structural Health Monitoring		
Structural Mechanics and Design		

Philosophy of Contemporary Physics	<i>Philosophy</i>	Art History; Architectural History; Film Studies; Translation; History; Philosophy; Music
Philosophy of Mind and Neuroscience	Ancient Philosophy	Iberian and Latin American Studies—Medieval, Golden Age, Colonial Spanish-American, Modern Spanish Peninsular, Modern Spanish-American
Science and Literature	Contemporary European Philosophy	Periods; Gender Studies
Scientific Revolution Studies	Epistemology	
Social History of Medicine and Technology	Ethics	
	Logic	
Literature	Medieval Philosophy	
Classics	Metaphysics	Sacred Music*
East Asian Studies	Modern Philosophy	Choral Conducting
French	Philosophy of Language	Organ
German	Philosophy of Mathematics	Vocal
Irish Studies	Philosophy of Mind	
Italian	Philosophy of Religion	
Spanish (Iberian and Latin American)	Philosophy of Science	Sociology
(Literatures can be studied in various combinations)	Political Philosophy	Comparative/Historical Sociology
		Cultural Sociology
Mathematics	Physics	Education
Algebra/Algebraic Geometry	Astrophysics	Gender and Family
Complex Analysis	Atomic Physics	Political Sociology
Discrete Mathematics	Biophysics	Race and Ethnicity
Geometry	Condensed Matter Physics	Religion
Logic	Elementary Particle Physics	Research Methods
Mathematics Physics	Network Physics	Social Networks
PDE	Nuclear Physics	Social Movements/Political Sociology
Topology	Statistical Physics	Social Psychology
	Theoretical Physics	Social Stratification
Medieval Studies	Political Science	Stratification and Inequality Theory
Art History	American Politics	Work, Economy, and Organizations
History	Comparative Politics	
Language and Literatures	Constitutional Studies	
Manuscript Studies	International Relations	
Music	Political Theory	Theology
Philosophy		Biblical Studies*
Theology	Psychology	Christianity and Judaism in Antiquity—Hebrew Bible and Judaica, New Testament and Early Church
Musical Arts	Cognition, Brain, and Behavior	Early Christian Studies*
<i>See Sacred Music</i>	Clinical Psychology	History of Christianity—Early Church, Medieval Studies, Reformation Studies, Modern Studies
Patent Law*	Developmental Psychology	
	Quantitative Psychology	Liturgical Studies
Peace Studies	Romance Languages and Literatures*	Moral Theology/Christian Ethics
Peace Studies and Anthropology	(See Literature for Ph.D. program)	Studies in Spirituality
Peace Studies and History	Comparative Literatures	Systematic Theology
Peace Studies and Political Science	French and Francophone Studies—Middle Ages, Renaissance, 17th-century Classical, 18th-century Enlightenment, 19th Century, 20th Century	Professional Studies* (Master of Divinity Program)
Peace Studies and Psychology	Italian Studies—Italian Literature: Medieval, Renaissance, Modern;	Theological Studies*
Peace Studies and Sociology		
Peace Studies and Theology		

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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 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 G.P.A. scale) in her or his undergraduate major courses and should meet the level of academic achievement that implies a developed ability 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 25 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, Mendoza College of Business, or the ESTEEM Program) 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 25 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 recom-

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mendation 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. Arrange for the submission of official Graduate Record Examination (GRE) General Test scores
9. 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 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 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 is November 1, though some departments have earlier deadlines. 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. International students, except those 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.

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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. 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 may receive a stipend, but 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 throughout 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.

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 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 ($1 \times 50 \times 15 = 750$), plus a minimum of 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.

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

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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 not taken for a grade do not count toward the maximal credit hour limit.

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, with the approval of the program chair or the director of graduate studies and the Graduate School, be taken to satisfy up to six hours of graduate credit requirements. Grades in these courses will count towards the student's G.P.A. 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 audit course after the last day for course discontinuance only in cases of serious physical or mental illness 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
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 G.P.A.; however, they will not be accepted for completion of graduate

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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 the G.P.A. 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 days from when grades were due (for the semester in which the I was given) to complete the coursework for a 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.

Grade Point Average

Quality point values are used to compute the student's G.P.A. The G.P.A. 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 G.P.A.

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 (G.P.A.).

An adequate G.P.A. 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 Ph.D. program.

If the student has completed a master's or Ph.D. 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 Ph.D. program. Grades for transferred courses are not included in the student's Notre Dame G.P.A.

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 computing 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 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 Counseling 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 92.

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.

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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 then 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.

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.

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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 G.P.A. 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

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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 original 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 the "Appeal Procedure for Graduate Students" on page 91.

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.

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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 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 normally chosen from the teaching and research faculty of the student's program. There also may be one co-director chosen from the faculty outside (or within) the student's program. In exceptional cases, a student may choose a thesis director from the Notre Dame teaching and research 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 G.P.A. 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 Electronic Thesis and Dissertation (ETD) website at <http://etd.nd.edu>. Only the official submis-

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sion 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 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 multi-media 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 Electronic Thesis and Dissertation (ETD) website, 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 Ph.D. 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 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

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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 submission 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 normally chosen from the teaching and research faculty of the student's program. There also may be one co-director chosen from the faculty outside (or within) the student's program. In exceptional cases, a student may choose a dissertation director from the Notre Dame teaching and research 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 and appointed by the Graduate School 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 G.P.A. 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).

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.

The 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 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, <http://graduateschool.nd.edu>. For formatting guid-

ance 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 Electronic Dissertation and Thesis database at <http://etd.nd.edu>. 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.

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Tuition and Expenses

Please note: The following tuition, fees, housing, and living costs are for the academic year 2015–2016. 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 2015–2016 is \$47,300. Tuition for the part-time student is \$2,628 per semester credit hour. Non-resident tuition is \$500 per semester.

ter credit hour. Non-resident tuition is \$500 per semester.

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: \$65***

** 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 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

Web: <http://studentaccounts.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

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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

Phone: (574) 631-5878
Web: <http://orlh.nd.edu>

University housing for married, families and single students is available on or adjacent to the campus.

Accommodations for students with families are available in University Village, a complex of 100 two-bedroom apartments (limited four-bedroom apartments) with washer/dryer, renting for \$520 – \$785 per month, excluding electricity. The Cripe Street Apartments, 24 one-bedroom units, are available from \$625 per month, excluding electricity. A deposit of one month's rent is required.

Accommodations for approximately 140 full-time, degree-seeking single graduate men and women are available in the 36-unit O'Hara-Grace Graduate Residence adjacent to the campus. Each apartment has a kitchen, one-and-one-half baths, living, and bedroom accommodations for four students, renting for \$465 a month (rent includes utilities, local phone and internet connection). Many general and departmental activities are held in Wilson Commons, a center for graduate students located next to the townhouses. The Fischer Graduate Housing apartment complex offers apartments with a kitchen, one full bath, and living and bedroom accommodations for two single students, renting for \$620 a month (rent includes utilities, local phone and internet connection). A deposit equal to one month's rent is required. Deductions may be set up for any student receiving a stipend. This is handled at the Office of Student Accounts, 100 Main Building, (574) 631-7113.

Health Insurance

Phone: (574) 631-6114
Web: <http://uhs.nd.edu>

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>.

The cost of the student premium for the 2015–2016 academic year (effective August 15, 2015, to August 14, 2016) is \$2,313. 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 2015–2016 is \$2,313 for degree-seeking students on full stipend support for both the Fall 2015 and Spring 2016 semesters. Students will receive a \$1,156.50 subsidy if they are on full stipend support for only one semester. Eligible students who enroll in the University-sponsored student health insurance between August 15, 2015 and August 14, 2016 and are not charged the full \$2,313 will receive a subsidy pro-rated based on the premium amount. Eligible students who waive the University-sponsored plan by September 15, 2015 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

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nine-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 add or increase the subsidy for those students who were not eligible for the full subsidy at the beginning of the academic year.

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 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.

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 Resources for Current Students page on the Graduate School website: <http://graduateschool.nd.edu>.

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

- Notebaert Professional Development Fund

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.

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Assistantships

The University recognizes four kinds of assistantships: Teaching, Project, Graduate Administrative, 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.

Teaching Assistantships

Teaching assistantships are awarded to students who, in furtherance of the University's academic mission as well as part of their own academic requirements and training, 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.)

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 research assistantships are awarded to students for research in furtherance of the University's academic mission but not directly related to the student's dissertation or preparation for it. An example might be assistance with computations for a faculty member's research when that faculty

member is in a department other than the student's own.

The expected time commitment for project research 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.

Graduate Administrative Assistantships

Graduate administrative assistantships are awarded to students for service in furtherance of the University's academic mission but not directly related to their dissertation or preparation for it. Examples are offering administrative support by editing a journal, managing a website, or assisting a faculty member with developing or coordinating a conference.

The expected time commitment for graduate administrative 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, in furtherance of the University's academic mission as well as part of their own academic development and training, 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 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 in furtherance of the University's academic mission 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

Students who have been awarded a full assistantship or fellowship may not un-

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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 studying on an F-1 or J-1 visa seeking employment off-campus for any amount of hours, whether fully supported or not, must obtain written authorization through the appropriate staff member within Notre Dame International.

Summer Employment: Doctoral Students

Recognizing that programs' funding models for doctoral students differ widely in the summer months, programs may award a fellowship in the summer yet still allow up to 20 hours of employment per week, either on or off campus. 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 seek-

ing 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.

Financial Aid

Office of Financial Aid

Telephone: (574) 631-6436
E-mail: 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

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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:

Gretar Tryggvason

Director of Graduate Studies:

Timothy C. Ovaert

Telephone: (574) 631-5430

Fax: (574) 631-8341

Location: 365 Fitzpatrick Hall

E-mail: amedept@nd.edu

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

Current research efforts in the program in aerospace and mechanical engineering are within the areas of aerospace sciences, biomechanics, biofluid mechanics, biomaterials, mechanical systems, robotics and design, solid mechanics and materials, and thermal and fluid sciences.

The programs of study and research lead to the degrees of master of science in aerospace engineering (M.S.A.E.), master of science in mechanical engineering (M.S.M.E.), master of engineering in mechanical engineering (M.E.M.E.), and doctor of philosophy (Ph.D). In addition, a combination master of engineering/juris doctor degree program is available to Notre Dame law students.

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	
Courses	18 credits (research) 24 credits (non-research)
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis or project

The master of science programs 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, course work-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 Master of Engineering in Mechanical Engineering

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Research or design project & report

The master of engineering in mechanical engineering is a course work-only, non-research degree that combines both business and engineering course work. It is intended primarily for students who are working in industry or planning careers in engineering management.

Thirty credits are required, and up to six credits can be independent study.

The Doctor of Philosophy

Degree Requirements	
Courses	39 credits
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations
	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 qualifying exam is administered at the end of the first year in residence. Passing the qualifying exam results in the formal admission of the student to the Ph.D. program. 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.

Tenured and Tenure-Track Faculty

Hafiz Atassi, Viola D. Hank Professor

Robert Bernhard, Professor

Joel Boerckel, Assistant Professor

Hsueh-Chia Chang, Concurrent Professor

Kenneth Christensen, Professor

Thomas C. Corke, Director of the Hessert Laboratory for Aerospace Research and Clark Equipment Professor

Hyungrok Do, Assistant Professor

Patrick F. Dunn, Professor

Harindra J. Fernando, Concurrent Professor

David Go, Assistant Professor

J. William Goodwine, Associate Professor

David Hoelzle, Assistant Professor

Frank Incropera, H. Clifford and Evelyn A. Brosey Professor of Mechanical Engineering

Thomas Juliano, Assistant Professor

Eric J. Jumper, Professor

Tengfei Luo, Assistant Professor

Karel Matous, Associate Professor

Scott C. Morris, Associate Professor

Glen L. Niebur, Professor

Timothy C. Ovaert, Professor and Director of Graduate Studies

Samuel Paolucci, Professor

Zhangli Peng, Assistant Professor

Joseph M. Powers, Professor

Matthew Ravosa, Concurrent Professor

David Richter, Concurrent Assistant Professor

Ryan K. Roeder, Associate Professor

Hiroataka Sakaue, Associate Professor

Steven R. Schmid, Professor

James P. Schmiedeler, Associate Professor

Fabio Semperlotti, Assistant Professor

Mihir Sen, Professor

Michael M. Stanasic, Associate Professor

Philippe Sucusky, Assistant Professor

Alexandros Taflanidis, Concurrent Associate Professor

Flint O. Thomas, Professor

Gretar Tryggvason, Viola D. Hank Professor and Department Chair

Meng Wang, Professor

Joannes Westerink, Concurrent Professor

Pinar Zorlutuna, Assistant Professor

BIOENGINEERING

Director:

Glen L. Niebur

Telephone: (574) 631-3327

Fax: (574) 631-2144

Location: 147 Multidisciplinary Research Building

E-mail: bioeng@nd.edu

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

Web: <http://www.nd.edu/~bioeng>

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 algorithms for radiation treatment and analysis of genomic information. The bioengineering program also includes environmental science research such as biological water treatment, bacteria-mineral interactions and bioremediation.

For specific requirements regarding the course work required for each track, see the program handbook.

The Doctor of Philosophy

Degree Requirements	
Courses	27 credits minimum
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations

Degree Requirements

Doctoral dissertation

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. At present, students may specialize in engineering science, biological science, or bioengineering.

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 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 generally take the oral candidacy examination before the end of the sixth semester in residence. This examination comprises a written proposal of research and an oral examination covering both course and research related topics focused on planned research.

CHEMICAL AND BIOMOLECULAR ENGINEERING

Chair:

Edward J. Maginn

Director of Graduate Studies:

William F. Schneider

Telephone: (574) 631-5580

Fax: (574) 631-8366

Location: 182 Fitzpatrick Hall

E-mail: cbe@nd.eduWeb: <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 conducting recitation sections for lecture courses, supervising laboratory courses, 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

Courses	15 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis

The master of science degree, with thesis, requires 15 credit hours of graduate course work (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	
Courses	24 credits
Total	60 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

The Ph.D. requires 24 credit hours of graduate course work (8 courses) with a minimum 3.3 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 course work distribution and grade point average.

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

Full-time students normally complete the Ph.D. degree requirements in about four-and-a-half years beyond the bachelor's degree.

Tenured and Tenure-Track Faculty

Basar Bilgicer, Assistant Professor

Paul W. Bohn, Schmitt Professor

Joan F. Brennecke, Keating-Crawford Professor of Chemical Engineering

Hsueh-Chia Chang, Bayer Corporation Professor of Chemical Engineering

Patricia Clark, Concurrent Professor

David Go, Concurrent Professor

Ruilan Guo, Assistant Professor

Jason C. Hicks, Assistant Professor

Davide A. Hill, Associate Professor

Prashant Kamat, Concurrent Professor

Jeffrey C. Kantor, Professor

Peter Kilpatrick, Matthew H. McCloskey Dean of the College of Engineering and Professor

David T. Leighton Jr., Professor

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

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

Paul J. McGinn, Professor

William A. Phillip, Assistant Professor

William F. Schneider, Director of Graduate Studies and Professor

Zachary D. Schultz, Concurrent Assistant Professor

Mark A. Stadtherr, Keating-Crawford Professor of Chemical Engineering

Franklin Tao, Concurrent Assistant Professor

Jonathan Whitmer, Assistant Professor

Eduardo E. Wolf, Anthony Earley Professor of Energy and the Environment

Jeremiah J. Zartman, Assistant Professor

Y. Elaine Zhu, Associate Professor

CIVIL AND ENVIRONMENTAL ENGINEERING AND EARTH SCIENCES

Chair:

Johannes Westerink

Director of Graduate Studies:

Antonio Simonetti

Telephone: (574) 631-5380

Fax: (574) 631-9236

Location: 156 Fitzpatrick Hall

E-mail: ceees@nd.edu

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

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 Science in Biological Engineering, Civil Engineering, Environmental Engineering, or Earth Sciences

Degree Requirements	
Courses	16 credits
Total	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 biological engineering (M.S.Bio.E.), master of science in civil engineering (M.S.C.E.), master of science in environmental engineering (M.S.Env.E.), and master of science in earth sciences (M.S.E.S.).

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 M.S. degrees require 30 semester credit hours, including at least 16 to 24 credits of formal graduate course work, 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	
Courses	18 credits
Total	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 course work, are required for the Ph.D. Students are expected to complete all degree requirements in approximately four years.

Course work 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

Diogo Bolster, Assistant Professor

Peter C. Burns, Henry J. Massman Jr.
Professor of Civil Engineering and Geological Sciences

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

Kyle Doudrick, Assistant Professor

Harinda J. Fernando, Wayne and Diana Murdy Endowed Professor of Engineering and Geosciences

Alan Hamlet, Assistant Professor

Amy Hixon, Assistant Professor

Ahsan Kareem, the Robert M. Moran
Professor of Civil and Environmental Engineering and Earth Sciences

Andrew Kennedy, Associate Professor

Kapil Khandelwal, Associate Professor

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

David J. Kirkner, Associate Professor

Yahya C. Kurama, Professor and Associate Chair

Patricia A. Maurice, Professor

George Mavroeidis, Assistant Professor

Clive R. Neal, Professor

Robert Nerenberg, Associate Professor

David Richter, Assistant Professor

Joshua D. Shrout, Associate Professor

Antonio Simonetti, Director of Graduate Studies and Associate Professor

Alexandros A. Taflanidis, Associate Professor

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

Na Wei, Assistant Professor

Joannes J. Westerink, Henry J. Massman Department Chair and Joseph and Nona Ahearn Endowed Professor in Computational Science and Engineering

COMPUTER SCIENCE AND ENGINEERING

Chair:

Kevin W. Bowyer

Director of Graduate Studies:

Gregory Madey

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Location: 326 Cushing Hall

E-mail: cse-grad-info@nd.edu

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

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	Admission to candidacy
	Candidacy examinations
	Master's thesis

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	
Courses	24 credits
Total	60 credits
Other	Admission to candidacy
	Candidacy examinations
	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 assistants, 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 course work 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 course work. 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

Panos J. Antsaklis, Director of the Center for Applied Mathematics, the H. C. and E. A. Brosey Professor of Electrical Engineering, and Concurrent Professor of Computer Science and Engineering

Albert-László Barabási, Adjunct Professor

Marina Blanton, Assistant Professor

Kevin W. Bowyer, Chair, the Schubmehl-Prein Professor, and Concurrent Professor of Electrical Engineering

Jay B. Brockman, Associate Professor and Concurrent Associate Professor of Electrical Engineering

Nitesh V. Chawla, Associate Professor

Danny Z. Chen, Professor

David Chiang, Associate Professor

Frank H. Collins, Concurrent Professor and the George and Winifred Clark Professor of Biological Sciences

Sidney D'Mello, Assistant Professor

Scott Emrich, Assistant Professor

Patrick J. Flynn, Professor

Eugene Henry, Professor Emeritus

Xiaobo Sharon Hu, Professor

Yih-Fang Huang, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Jesús A. Izaguirre, Associate Professor

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

Gregory Madey, Research Professor and Director of Graduate Studies

Collin McMillan, Assistant Professor

Tijana Milenkovic, Assistant Professor

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

Jaroslav (Jarek) Nabrzyski, Concurrent Associate Professor and Director of the Center for Research Computing

Michael Niemier, Associate Professor

Christian Poellabauer, Associate Professor

Laurel Riek, Clare Boothe Luce Assistant Professor

Walter Scheirer, Assistant Professor

Yiyu Shi, Associate Professor

Robert L. Stevenson, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Aaron Striegel, Associate Professor

Douglas Thain, Associate Professor and Director of Graduate Studies

Zoltan Toroczkai, Concurrent Professor and Associate Professor of Physics

John J. Uhran Jr., Professor Emeritus and Professor Emeritus of Electrical Engineering

Chaoli Wang, Associate Professor

Dong Wang, Assistant Professor

Timothy Weninger, Assistant Professor

Joahannes Westerink, Concurrent Professor and Professor of Civil Engineering

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

The Master of Science in Electrical Engineering

Degree Requirements	
Courses	18 credits (research) 30 credits (non-research)
Total	30 credits
Other	Admission to candidacy
	Qualifying examination
	Master's thesis

A research master of science in electrical engineering (M.S.E.E.) 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 M.S.E.E. requires 30 credit hours of course work. 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.

ELECTRICAL ENGINEERING

Chair:

Thomas E. Fuja

Director of Graduate Studies:

Gregory L. Snider

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Fax: (574) 631-4393

Location: 275 Fitzpatrick Hall

E-mail: eegrad@nd.edu

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

The Doctor of Philosophy

Degree Requirements	
Courses	36 credits
Total	60 credits
Other	Admission to candidacy
	Qualifying examination
	Candidacy examinations
	Doctoral dissertation

To continue to the Ph.D. program, students must take the qualifying exam 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 J. Antsaklis, the H. C. and E. A. Brosey Professor of Electrical Engineering, and Concurrent Professor of Computer Science and Engineering

Peter H. Bauer, Professor

Gary H. Bernstein, the Frank M. Freimann Professor of Electrical Engineering

Patrick J. Fay, Professor

Thomas E. Fuja, Chair and Professor

Vijay Gupta, Associate Professor

Martin Haenggi, Professor

Douglas C. Hall, Associate Professor

Bernard Hochwald, the Frank M. Freimann Professor of Electrical Engineering

Anthony Hoffman, Assistant Professor

Scott Howard, Assistant Professor

Yih-Fang Huang, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Debdeep Jena, Professor

J. Nicholas Laneman, Professor

Michael D. Lemmon, Professor

Craig S. Lent, the Frank M. Freimann Professor of Electrical Engineering

Hai Lin, Assistant Professor

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

Wolfgang Porod, Director of the Center for Nano Science and Technology and the Frank M. Freimann Professor of Electrical Engineering

Ken D. Sauer, Associate Professor

Alan C. Seabaugh, Director of the Midwest Institute for Nanoelectronics Discovery (MIND) and Professor

Gregory Snider, Director of Graduate Studies and Professor

Robert L. Stevenson, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

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

Mark A. Wistey, Assistant Professor

Grace Xing, Professor

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 A.B.E.T. accredited engineering or computer science program and must also be a candidate for the juris doctor degree in the Notre Dame Law School. The master's of engineering program is not available as an individual degree program.

To be awarded both degrees, 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 course work-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.

ENGINEERING AND LAW DUAL DEGREE PROGRAM

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

THE DIVISION OF HUMANITIES

ART, ART HISTORY, AND DESIGN

Chair:

Richard Gray

Director of Graduate Studies:

Maria Tomasula

Telephone: (574) 631-7602

Fax: (574) 631-6312

Location: 306 Riley Hall

E-mail: art@nd.edu

Web site: <http://www.nd.edu/~art>

The program in Art, Art History, and Design offers the master of fine arts (M.F.A.) degree in studio art and design and the master of arts (M.A.) degree in art history. In studio art and design, the department also awards the M.A. degree, but only to students who are not accepted to degree candidacy in the M.F.A. program.

Art studio and design students may concentrate in ceramics, graphic design, industrial design, painting, photography, printmaking, and sculpture, or in a combination of these disciplines. Art history students select from a range of course offerings to fulfill their professional interests. In addition to specific courses, graduate students may pursue an area of interest through a system of independent study with a faculty advisor and a graduate committee selected by the student. M.F.A.

students are expected to develop a personal direction that culminates in a professional exhibition of visual work or a research project in art history.

The Master of Fine Arts

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

The M.F.A. at Notre Dame is for 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 M.F.A. 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 M.F.A. 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 M.F.A. candidacy, the successful completion of a written thesis approved by the student's thesis committee, 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: Art History

Degree Requirements	
Courses	30 credits
Total	36 credits
Other	Admission to candidacy
	Written thesis
	Thesis presentation at spring symposium
	Foreign language requirement

The M.A. prepares the student for more advanced graduate work by providing him or her with the opportunity to solidify general and specialized art historical knowledge and to hone research skills. The degree may also serve as a foundation for employment or further study in fields such as museology, visual image management, and art dealing and investment. The M.A. in art history is not a terminal degree. A doctorate is normally required to teach at the collegiate level.

The M.A. in art history requires the completion of 36 credit hours of graduate study, including six credit hours of thesis research, with a B (3.0) or better average. Progress in the art history program is dependent upon the successful completion of a written thesis, which will be presented at the art history graduate symposium in the spring of the student's second year, and evidence of reading ability in one foreign language, either German, French, or another language approved by the graduate advisor. Reading ability is normally demonstrated by obtaining a passing grade on the appropriate Graduate Reading Examination administered by the University. This requirement must be fulfilled during the first year of graduate study.

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

The Master of Arts: Studio Art and Design

Degree Requirements	
Courses	30 credits
Total	40 credits
Other	Admission to candidacy

The non-research master of arts degree (M.A.) program in studio art and design is granted to M.F.A. students who either are not admitted to M.F.A. candidacy or choose to leave the M.F.A. 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

Robert R. Coleman, Associate Professor and Research Specialist in the Medieval Institute

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

Ann-Marie Conrado, Assistant Professor

Jean A. Dibble, Professor

Dennis P. Doordan, Concurrent Professor of Art, Art History, and Design and Professor of Architecture

Paul A. Down, Professor

Richard Gray, Chair and Associate Professor

William J. Kremer, Professor

Jason R. Lahr, Assistant Professor

Martina Lopez, Associate Professor

André Murnieks, Assistant Professor

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

Robin F. Rhodes, Associate Professor and Concurrent Associate Professor of Classics

Maria Tomasula, The Michael P. Grace II Chair in Arts and Letters (Collegiate Chair), Director of Graduate Studies, and Professor

CLASSICS

Chair:

Elizabeth Forbis Mazurek

Director of Graduate Studies:

Brian Krostenko

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Location: 304 O'Shaughnessy

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

The Master of Arts

Degree Requirements	
Courses	30 credits
Total	36 credits
Other	Admission to candidacy
	Foreign language requirement
	Preparation of reading list
	Candidacy 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

Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

Christopher A. Baron, Associate Professor of Classics

W. Martin Bloomer, Professor of Classics

Li Guo, Professor of Arabic Language and Literature

David Hernandez, Assistant Professor of Classics

Brian Krostenko, Director of Graduate Studies and Associate Professor of Classics

Blake Leyerle, John Cardinal O'Hara, C.S.C., Associate Professor of Theology

Elizabeth Forbis Mazurek, Chair and Associate Professor of Classics

Hildegund Müller, Associate Professor of Classics

David O'Connor, Associate Professor of Philosophy

Robin Francis Rhodes, Associate Professor of Art History

Catherine Schlegel, Associate Professor of Classics

Isabelle Torrance, Associate Professor of Classics

EARLY CHRISTIAN STUDIES

Chairs:

Elizabeth Forbis Mazurek (Classics)
J. Matthew Ashley (Theology)

Director of Graduate Studies:

John T. Fitzgerald (Theology)

Telephone: (574) 631-7195

Fax: (574) 631-2153

Location: 304 O'Shaughnessy

Email: classics@nd.edu

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

The Master of Arts

Degree Requirements	
Courses	42 credits
Total	42 credits
Other	Admission to candidacy
	Foreign language requirement
	Preparation of reading list
	Candidacy examinations 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, 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 a committee of 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] 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

Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

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

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

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

Associated Faculty

Mary Rose D'Angelo, Associate Professor of Theology

Stephen E. Gersh, Professor of Medieval Studies

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

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

Candida R. Moss, Professor of New Testament and Early Christianity

Hildegund Müller, Associate Professor of Classics

David K. O'Connor, Associate Professor of Philosophy and Concurrent Associate Professor of Classics

Gretchen J. Reydam-Schils, Professor and Chair, Program of Liberal Studies and Fellow in the Nanovic Institute for European Studies

ENGLISH

Chair:

Jesse M. Lander

Director of Graduate Studies:

Sara Maurer

Director of Creative Writing:

Joyelle McSweeney

English

Telephone: (574) 631-7226

Fax: (574) 631-4795

Location: 356 O'Shaughnessy

E-mail: english@nd.edu

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

Creative Writing

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Fax: (574) 631-4795

Location: 340 O'Shaughnessy

E-mail: creativewriting@nd.edu

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

The Master of Arts: English and American Literature

Degree Requirements	
Courses	30–33 credits
Total	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

ENGLISH

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	
Courses	21 credits of English 9 credits of Law
Total	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 nonresearch 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	
Courses	24 credits
Total	36 credits
Other	Admission to candidacy
	Master's thesis

The graduate creative writing program is a four-semester program in which students take 36 credit hours of writing workshops, thesis preparation tu-

torials, and literature classes. Students may also choose to work as editorial assistants on our national literary magazine, *The Notre Dame Review*. 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	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The Ph.D. program requires 42 credit hours of course work. 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 course work 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; either a second historical period or a special topic; and one examination in literary theory/methodology. One of these three fields, ordinarily the field in which the student intends to write his or her dissertation, is designated the major field. These examinations are intended to determine whether the student possesses the theoretical skills and specialized knowledge necessary for writing a dissertation and for teaching in his or her field. Special reading courses enable students to dedicate the majority of their last two semesters of course work to preparation for these examinations. The written part of the examination is followed by an oral component.

Dissertation Proposal

In the fall of the fourth year, 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, Associate Professor

Joseph A. Buttigieg, William R. Kenan Jr. Professor of English and Direc-

ENGLISH ~ HISTORY

tor of the Office of International Studies	Kathryn Kerby-Fulton, Notre Dame Professor of English	Chris R. Vanden Bossche, Professor and Director of Undergraduate Studies
James M. Collins, Professor of Film, Television, and Theatre and Concurrent Professor of English	Declan Kiberd, Donald and Mrilyn Keough Professor of Irish Studies	Elliott Visconsi, Associate Professor, Concurrent Associate Professor of Law, and Chief Academic Digital Officer
Jesse Constantino, Assistant Professor	Laura Knoppers, Professor	
Nan Da, Assistant Professor	Greg P. Kucich, Director of the London Program and Professor	Laura Dassow Walls, William P. and Hazel B. White Professor of English
Margaret Doody, John and Barbara Glynn Family Professor of Literature	Jesse M. Lander, Chair and Associate Professor	Henry Weinfield, Professor of Liberal Studies and Concurrent Professor of English
John Duffy, Associate Professor and Director, University Writing Center and College Seminar Program	Jose Limon, Notre Dame Professor of American Literature and Director for Latino Studies	Thomas A. Werge, Professor and Concurrent Professor in the Master of Education Program
Stephen M. Fallon, Cavanaugh Professor of Humanities and Professor of English	Sara Maurer, Director of Graduate Studies (English) and Associate Professor	Matthew Wilkens, Assistant Professor
Christopher Fox, Professor of English, Director of the Keough-Naughton Institute for Irish Studies	Tim Machan, Professor	
Stephen A. Fredman, Professor	Kate Marshall, Assistant Professor	
Johannes Goransson, Assistant Professor	Barry McCrea, Professor	
Barbara J. Green, Associate Professor	Joyelle McSweeney, Director of Graduate Studies (Creative Writing) and Associate Professor	
Stuart Greene, Associate Professor	Orlando Menes, Associate Professor	
Sandra Gustafson, Professor	Susannah Monta, Associate Professor	
Susan Cannon Harris, Associate Professor and Concurrent Associate Professor in the Keough-Naughton Institute for Irish Studies	Kinohi Nishikawa, Assistant Professor	
Peter Holland, McMeel Professor in Shakespeare Studies in the Department of Film, Television and Theatre, and Concurrent Professor in English	William A. O'Rourke, Professor	
Romana Huk, Associate Professor	Valerie Sayers, Professor	
Z'etoile Imma, Assistant Professor	John Sitter, Mary Lee Duda Professor of Literature	
Cyraina Johnson-Roullier, Associate Professor	Yasmin Solomonescu, Assistant Professor	
	David Wayne Thomas, Associate Professor	
	Steve Tomasula, Associate Professor	
	Azareen Van der Vliet Oloomi, Assistant Professor	

HISTORY

Chair:

Patrick Griffin

Director of Graduate Studies:

Jon T. Coleman

Telephone: (574) 631-4262

Fax: (574) 631-4717

Location: 219 O'Shaughnessy Hall

E-mail: histdgs.1@nd.edu

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

The history programs accept 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 on the course work and language requirements in each field.

HISTORY

The Master of Arts

Degree Requirements	
Courses	24 credits
Total	33 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations

Students may receive their master of arts after completing 33 credit hours of study, including one graduate-level seminar in history and 24 credit hours of graduate-level work (seminars, colloquia, directed readings, supplemental research, and readings) in history or related disciplines. The master's degree demands satisfactory completion of course work 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

First-year examinations are oral examinations administered near the end of the student's second semester of residence. The first-year examination does not take the place of a master's exam.

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 examination 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 examination.

Students entering Notre Dame with a master's degree in history from another institution normally have the same course work, writing, and examination requirements as those entering without 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 course work and language requirements of each field.

The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	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 42 credit hours of study, including at least two graduate-level seminars.

In addition to completing prescribed course work, 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 being advanced 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

Mike Amezcua, Assistant Professor

R. Scott Appleby, the John M. Regan Jr. Director of the Joan B. Kroc Institute for International Peace Studies, and Professor of History

Edward N. Beatty, Associate Professor

Gail Bederman, Associate Professor

Liang Cai, Assistant Professor

Catherine Cangany, Assistant Professor

Jon T. Coleman, Director of Graduate Studies and Professor

John Deak, Assistant Professor

Lauren Faulkner Rossi, Assistant Professor

Felipe Fernández-Armesto, William P. Reynolds Professor

Karen Graubart, Associate Professor

Brad S. Gregory, Professor

Patrick Griffin, Chair and Madden Henneby Professor

Christopher S. Hamlin, Professor

Asher Kaufman, Associate Professor

Thomas A. Kselman, Professor

Semion Lyandres, Professor

Alexander M. Martin, Professor

John T. McGreevy, I.A. O'Shaughnessy
Dean of the College of Arts and
Letters, and Professor

Rebecca Tinio McKenna, Assistant
Professor

Margaret Meserve, Associate Professor

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

Dian Hechtner Murray, Professor

Thomas F. X. Noble, Andrew V.
Tackes Professor of History

Mark Noll, the Francis A. McAnaney
Professor of History

Paul Ocobock, Assistant Professor

Jaime Pensado, Carl E. Koch Associ-
ate Professor

Richard B. Pierce, Associate Professor

Linda Przybyszewski, Associate Profes-
sor

Rory Rapple, Assistant Professor

James Smyth, Professor

Robert E. Sullivan, Professor

Julia Adeney Thomas, Associate Profes-
sor

Deborah Tor, Assistant Professor

James Turner, the Rev. John J. Cava-
naugh, C.S.C., Professor of the
Humanities

John H. Van Engen, Professor of His-
tory and Director of the Medieval
Institute

HISTORY AND PHILOSOPHY OF SCIENCE

Program Director:

Katherine Brading

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Fax: (574) 631-7418

Location: 453 Geddes Hall

E-mail: reilly@nd.edu

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

HPS at Notre Dame is an interdepart-
mental 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. For this reason
it is defined as a five-year program,
rather than the normal four. Thus
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 de-
partments.

The Master of Arts

Degree Requirements	
Courses	36 credits
Total	36 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 de-
gree, although individuals concurrent-
ly enrolled in other doctoral graduate
programs of the University may seek to
earn a non-research HPS master's de-
gree in order to complement their doc-
toral 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 nonresearch HPS M.A. degree
requires the completion of 36 credit
hours of course work. Three courses
in history of science and three courses
in philosophy of science 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 phi-
losophy of science. Students taking the
nonresearch HPS M.A. concurrently
with a Ph.D. in another Notre Dame
program may count up to nine hours
of course work 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 lan-
guage (ordinarily French or German)
is required. A one-hour oral compre-
hensive examination completes the
requirements for this research M.A.
degree.

A one-hour oral examination, based
on course work, ompletes the require-
ments 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.

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. A one-hour oral comprehensive examination completes the requirements for this research M.A. degree.

The Doctor of Philosophy

Degree Requirements	
Courses	45 credits
Total	62 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

HPS students pursue the Ph.D. degree in either a history track or a philosophy track.

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 one modern foreign language. In addition, competence has to be shown either in a second language or in a technical discipline bearing on the student's research work, such as one of the natural sciences.

In the spring of the third year, the student will prepare for the Ph.D. candidacy examination, taken in the late

summer. This will consist of two parts, written and oral.

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. Students who elect the ethics of science and technology concentration will satisfy the philosophy-track course requirements, with some exceptions. 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.

No later than the summer after his or her second year, the philosophy-track student will take a written qualifying examination in the history of philosophy administered by the Philosophy Department. By the end of his or her third year, the student will also be expected to have two "qualifying" papers approved (see philosophy doctoral requirements). Normally in the first semester of the fourth 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.

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 second semester after the two-year residency and completion of the language requirements. Successful completion of the written examinations is required for admission to the oral examination.

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 Graduate School requires that dissertation proposals be approved by the end of the eighth semester in order for one to be eligible for continued funding.

Tenured and Tenure-Track Faculty

J. Matthew Ashley, Associate Professor of Theology

Francesca Bordogna, Associate Professor in the Program of Liberal Studies

Katherine A. Brading, Director of Graduate Studies and Associate Professor of Philosophy

Anjan Chakravarty, Professor of Philosophy

Jon Coleman, Professor of History

Michael Crowe, John J. Cavanaugh Professor (Emeritus) in the Humanities, Professor in the Program of Liberal Studies

Celia Deane-Drummond, Professor of Theology

Christopher Fox, Professor of English, Director of the Keough-Naughton Institute for Irish Studies

Robert D. Goulding, Associate Professor in the Program of Liberal Studies

Gary M. Gutting, Professor of Philosophy

Christopher S. Hamlin, Professor of History

Don A. Howard, Professor of Philosophy

Lynn S. Joy, Professor of Philosophy

Janet Kourany, Associate Professor of Philosophy

A. Edward Manier, Professor (Emeritus) of Philosophy

Kate Marshall, Assistant Professor of English

Vaughn R. McKim, Associate Professor (Emeritus) of Philosophy

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

Kristin Shrader-Frechette, the F. J. and H. M. O'Neill Professor of Philosophy, Concurrent Professor of Biological Sciences

Phillip R. Sloan, Professor (Emeritus) in the Program of Liberal Studies

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

James C. Turner, the Rev. John J. Cavanaugh, C.S.C., Professor (Emeritus) of the Humanities

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

PH.D. IN LITERATURE

Program Director:

Laura Betz, Acting Director

Telephone: (574) 631-0481

Location: 323 O'Shaughnessy Hall

E-mail: litprog@nd.edu

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

The Doctor of Philosophy

Degree Requirements	
Courses	51 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examination
	Doctoral dissertation

The Ph.D. in Literature offers an innovative academic framework for the formation of future scholar-teachers in both the classical and modern languages and literatures. The program requires its students to complete a minimum of 51 credit hours from regular graduate courses. Students who have obtained credits for graduate courses taken after their undergraduate degree and prior to entering the program may be allowed to transfer a maximum of 6 credit hours. Students who have completed an M.A. before entering the program may be allowed to transfer a maximum of 24 credit hours. The transfer of credit hours is not automatic and requires the approval of the program's director and the Graduate School.

During their time of coursework before taking exams, students are required to enroll in the year-long course (1.5 credits per semester) "Learning the Profession." Students may opt to take this course on an S/U basis, in

which case the credits earned will not count towards the 51 credits of coursework required by the program. For additional course work requirements, consult the program's handbook.

Languages

All students in the Ph.D. in Literature Program are expected to be able to read and conduct research in at least two languages besides their own native language.

Students are minimally required to demonstrate near-native proficiency in the language of their major area of study and a scholarly reading knowledge in an additional language. The language skills required will vary according to the individualized program of study. Language requirements are designed to provide a rigorous base for in-depth study of two or more literary traditions and to ensure that students will successfully compete for placement in national literature departments as well as interdisciplinary programs.

Examinations

The Graduate School requires all doctoral candidates to complete their Ph. D. candidacy exam and dissertation proposal defense by the end of their fourth year of study. This deadline, however, represents nothing more than the utmost limit of acceptability. Students in the Ph.D. in Literature Program are strongly advised to organize and structure their coursework in a manner that permits them to sit for the candidacy exam and dissertation proposal defense in their third year.

Participating Faculty

The following is a partial list of Notre Dame faculty who have worked closely with the Ph.D. in Literature Program. They form a core group of outstanding scholars who will be joined by numer-

PH.D. IN LITERATURE

ous other faculty whose interests and expertise will enable students to craft doctoral degrees responsive to their own particular interests in world literatures. For a complete listing of participating faculty and their scholarly interests and current graduate students please visit our Web site at <http://phdliterature.nd.edu>.

Associated Tenured and Tenure-Track Faculty

- Thomas F. Anderson, Professor of Spanish, Department of Romance Languages and Literatures, and Chair, Department Romance Languages and Literatures
- Chris Abram, Associate Professor of Anglo-Saxon and Old Norse Literature, Department of English
- Zygmunt Baranski, Notre Dame Professor of Dante and Italian Studies, Department of Romance Languages and Literatures
- W. Martin Bloomer, Professor of Ancient Rhetoric and Education, Department of Classics; and Director, Ph.D. in Literature Program
- Tobias Boes, Associate Professor of German, Department of German Language and Literature
- Maureen Boulton, Professor of French, Department of Romance Languages and Literatures
- Joseph A. Buttigieg, William R. Kennan, Jr. Professor of English, Department of English
- Theodore J. Cachey Jr., Professor of Italian, Albert J. Ravarino Family Director of Dante and Italian Studies, Department of Romance Languages
- James Collins, Professor of Digital Culture, Postmodernism, Cultural Theory, Narrative; Department of Film, Television, and Theatre
- JoAnn DellaNeva, Professor of French Renaissance Literature, Department of Romance Languages and Literatures
- Margaret Doody, John and Barbara Glynn Family Professor of Literature, Department of English
- Julia V. Douthwaite, Professor of French and Francophone Studies, Department of Romance Languages and Literatures
- Carsten Dutt, Assistant Professor of Modern German Literature, Department of German and Russian
- Christopher Fox, Professor of 18th Century British and Irish Literature; Director of the Keough-Naughton Institute for Irish Studies
- Stephen Gersh, Professor of Medieval Studies, Department of Philosophy
- Ben A. Heller, Associate Professor of Spanish American and Caribbean Literatures, Department of Romance Languages and Literatures
- Peter Holland, McMeel Family Professor in Shakespeare Studies, Department of Film, Television and Theatre
- Vittorio Hösle, Paul G. Kimball Professor of Arts and Letters, Department of German and Russian
- Encarnación Juárez-Almendros, Associate Professor of Early Modern Spanish Literature, Department of Romance Languages and Literatures
- Carlos Jáuregui, Associate Professor of Latin American Literature and Anthropology, Department of Romance Languages and Literatures
- Lionel M. Jensen, Associate Professor of East Asian Languages & Culture, Department of East Asian Languages and Cultures
- Kathryn Kerby-Fulton, The Notre Dame Professor of English, Department of English
- Brian Krostenko, Associate Professor of Rhetoric and Linguistics of the Late Roman Republic, Department of Classics
- Declan Kiberd, Donald and Marilyn Keough Professor of Irish Studies, Department of English
- José E. Limón, Notre Dame Professor of American Literature and Latino Literature, Department of English
- Barry McCrea, Keough Family Professor of Irish Studies, Department of Irish Language and Literature
- Peter McQuillan, Associate Professor of Irish Language & Literature and Chair, Department of Irish Language and Literature
- Christian Moevs, Associate Professor of Dante and Medieval Italian Literature, Department of Romance Languages and Literatures
- Vittorio Montemaggi, Assistant Professor of Religion and Literature, Department of Romance Languages and Literatures
- Marisel Moreno-Anderson, Associate Professor of US Latino/a Literature, Department of Romance Languages and Literatures
- Hildegund Müller, Associate Professor, of Late Antique Latin Literature, Department of Classics
- Bríona Nic Dhiarmada, Thomas J. & Kathleen M. O'Donnell Professor of Irish Studies, Department of Irish Language and Literature

Robert E. Norton, Professor of German and Associate Vice President for Internationalization, Department of German and Russian

Brian Ó Conchubhair, Associate Professor of Irish Language & Literature and Director of the Center for the Study of Languages & Cultures, Department of Irish Language and Literature

Diarmuid Ó Giolláin, Professor of Irish Language and Literature, Department of Irish Language and Literature

Catherine Perry, Associate Professor of French and *Chevalier* in the French national order, "Ordre des palmes académiques," Department of Romance Languages and Literatures

Maria Rosa Olivera-Williams, Professor of Latin American Literature, Department of Romance Languages and Literatures

Alison Rice, Associate Professor of French 20th- and 21st-century Francophone Literature, Department of Romance Languages and Literatures

Mark W. Roche, Rev. Edmund P. Joyce, C.S.C. Professor of German Language and Literature, Department of German and Russian

Dayle Seidenspinner-Núñez, Professor of Comparative Medieval Spanish Literature, Department of Romance Languages and Literatures

Isabelle Torrance, Associate Professor of Greek Tragedy and Religion, Department of Classics

Alain Toumayan, Professor of 19th- and 20th-century French Lit-

erature, Department of Romance Languages and Literatures

Juan Vittuli, Associate Professor of Iberian and Latin-American Literature, Department of Romance Languages and Literatures

John Welle, Professor of Modern Italian Literature, Department of Romance Languages and Literatures

MEDIEVAL STUDIES

Director:

John Van Engen

Director of Graduate Studies:

Chris Abram

Telephone: (574) 631-6603

Fax: (574) 631-8644

Location: 715 Hesburgh Library

E-mail: medinst@nd.edu

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

The Medieval Institute offers a doctor of philosophy degree in medieval studies. After two years of course work, and completion of examinations in the third year, students earn a master of medieval studies (hereafter M.M.S.) 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	
Courses	39 credits
Total	43 credits
Other	Admission to candidacy

Degree Requirements

	Foreign language requirement
	Second-year project
	Colloquium presentation

The Second Year Project

A general statement of topic for the second-year project, with signed advisor approval, is due on May 1st of a student's first year.

Completed projects are due in April of the second year. No incomplete grades are allowed, except in extraordinary circumstances. If the project is not complete and satisfactory, the student may not continue into the third year.

The Medieval Institute holds an annual public colloquium each April for second-year students to give formal presentations on their research projects to the Medieval Institute community.

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 before taking their comprehensive exams in the third year (i.e., by the end of the fifth semester).

 MEDIEVAL STUDIES

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	
Courses	48 credits
Total	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 five 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 M.M.S. degree (this decision would reflect failure of the exams or an inability to make reasonable progress toward a proposal)

The dissertation proposal is expected to be submitted no later than the first day of the fall semester of the student's fourth year. After acceptance of the dissertation proposal, most students will require three or four years to complete the dissertation. It is not unusual for a satisfactory student to take six or seven 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.

Faculty Fellows of the Medieval Institute

Chris Abram, Assistant Professor of English and Director of Graduate Studies, Medieval Institute

Rev. Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

Ann Astell, Professor of Theology

Yury Avvakumov, Assistant Professor of Theology

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

Alexander Blachly, Professor of Music

W. Martin Bloomer, Professor of Classics

Maureen B. McCann Boulton, Professor of French Language and Literature

Theodore J. Cachey Jr., Professor of Romance Languages and Literatures; Director, Rome Global Gateway; and VP-Associate Provost for Internationalization

Peter J. Casarella, Associate Professor of Theology

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

Robert R. Coleman, Associate Professor of Art, Art History, and Design, and Research Specialist in the Medieval Institute

Richard Cross, Rev. John A. O'Brien Professor in Philosophy and Chair, Department of Philosophy

Rev. Brian Daley, S.J., the Catherine F. Huisking Professor of Theology

JoAnn DellaNeva, Professor of French Language and Literature

Rev. Michael S. Driscoll, Associate Professor of Theology

Stephen D. Dumont, Professor of Philosophy

Kent Emery Jr., Professor in the Program of Liberal Studies

Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy

Felipe Fernandez-Armesto, William P. Reynolds Professor of History

Alfred Freddoso, John and Jean Oesterle Professor of Philosophy

Stephen E. Gersh, Professor and Concurrent Professor of Philosophy

Robert Goulding, Associate Professor in the Program of Liberal Studies and the Program in the History and Philosophy of Science

MEDIEVAL STUDIES  PHILOSOPHY

Karen B. Graubart, Carl E. Koch Associate Professor of History	Blake Leyerle, Associate Professor of Theology and Concurrent Associate Professor of Classics	Denis Robichaud, Assistant Professor in the Program of Liberal Studies
Brad S. Gregory, Dorothy G. Griffin Professor of Early Modern European History	Tim William Machan, Professor of English	Dayle Seidenspinner-Núñez, Professor of Spanish Language and Literature
Li Guo, Professor of Classics and Director of the Arabic Studies Program	Julia Marvin, Associate Professor in the Program of Liberal Studies	Susan Guise Sheridan, Associate Professor of Anthropology
David T. Gura, Curator of Ancient and Medieval Manuscripts, Early Imprints, and History of the Book, and Concurrent Assistant Professor of Medieval Studies	Peter McQuillan, Chair and Associate Professor of Irish Language and Literature	Deborah Tor, Assistant Professor of History
Daniel Hobbins, Associate Professor of History	Margaret H. Meserve, Associate Professor of History and Associate Dean, College of Arts and Letters	John Van Engen, Andrew V. Tackes Professor of Medieval History and Robert M. Conway Director of the Medieval Institute
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	Christian R. Moevs, Associate Professor of Italian Language and Literature	Joseph Wawrykow, Associate Professor of Theology
Tala Jarjour, Assistant Professor of Music	Vittorio Montemaggi, Assistant Professor of Religion and Literature and Concurrent Assistant Professor of Theology	
Peter Jeffrey, Michael P. Grace Chair in Music	Hildegund Müller, Associate Professor of Classics and Associate Vice President for Research	
Rev. John I. Jenkins, C.S.C., President of the University and Professor of Philosophy	Amy C. Mulligan, Assistant Professor of Irish Language and Literature	
Claire Jones, Assistant Professor of German	David O'Connor, Associate Professor of Philosophy and Concurrent Associate Professor of Classics	
Encarnación Juárez-Almendros, Associate Professor of Spanish Language and Literature	Mark C. Pilkinton, Professor of Film, Television, and Theatre	
Kathryn Kerby-Fulton, Notre Dame Professor of English	Jean Porter, John A. O'Brien Professor of Theology	
Mary M. Keys, Associate Professor of Political Science	Rory Rapple, Assistant Professor of History	
Brian Krostenko, Associate Professor of Classics	Gretchen J. Reydam-Schils, Department Chair, Program of Liberal Studies, and Concurrent Professor, Philosophy	
Ian Kuijt, Professor of Anthropology	Gabriel Said Reynolds, Professor of Islamic Studies and Theology	

PHILOSOPHY

Chair:

Richard Cross

Director of Graduate Studies:

Curtis Franks

Telephone: (574) 631-4278

Fax: (574) 631-0588

Location: 100 Malloy Hall

E-mail: ndphilo@nd.edu

Web: <http://www.nd.edu/~ndphilo>

The Master of Arts

Degree Requirements	
Courses	27 credits
Total	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.

PHILOSOPHY

upon successful completion of the written Ph.D. candidacy examination (history exam) and 27 credit hours of graduate course work.

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 course work and passing a special M.A. oral candidacy examination.

The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Qualifying papers
	Candidacy examinations
	Doctoral dissertation

For the doctorate a student must complete 42 credit hours of graduate course work. Students who enter the doctoral program with an M.A. are normally excused from 6 to 12 credit hours of graduate course work. Any philosophy graduate student is permitted to take up to 6 credit hours of approved undergraduate course work in philosophy and up to 6 credit hours of course work 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 course work.

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

Karl Ameriks, McMahan-Hank Professor of Philosophy and Fellow in the Nanovic Institute for European Studies

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

Timothy Bays, Associate Professor

Patricia A. Blanchette, Professor

Katherine Brading, Director of Graduate Studies in History and Philosophy of Science and Associate Professor

Anjan Chakravartty, Professor and Director of the Reilly Center for Science, Technology, and Values

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

Cornelius F. Delaney, Professor

Michael R. De Paul, Professor

Michael Detlefsen, McMahon-Hank Professor of Philosophy

Stephen D. Dumont, Professor

Thomas P. Flint, Professor

Curtis Franks, Director of Graduate Studies and Associate Professor

Alfred J. Freddoso, John and Jean Oesterle Professor of Thomistic Studies

Gary M. Gutting, Notre Dame Professor of Philosophy and Fellow in the Nanovic Institute for European Studies

Don A. Howard, Director of the Reilly Center for Science, Technology and Values and Professor

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

Lynn Joy, Professor

Joseph Karbowski, Assistant Professor

Sean Kelsey, Associate Professor

Janet Kourany, Associate Professor

Michael J. Loux, George N. Shuster Professor of Philosophy Emeritus

Alasdair MacIntyre, Rev. John A. O'Brien Senior Research Professor of Philosophy Emeritus

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

John O'Callaghan, Associate Professor

David K. O'Connor, Associate Professor of Philosophy and Concurrent Associate Professor of Classics

Alvin Plantinga, John A. O'Brien Professor of Philosophy Emeritus

Grant Ramsey, Assistant Professor

Michael C. Rea, Professor and Director of the Center for Philosophy of Religion

Blake Roeber, Assistant Professor

Fred Rush, Associate Professor

Kenneth M. Sayre, Professor Emeritus

Christopher Shields, George N. Shuster Professor of Philosophy

Kristin Shrader-Frechette, F. J. and H. M. O'Neill Professor of Philosophy, Concurrent Professor of Biological Sciences, and Fellow in the Joan B. Kroc Institute for International Peace Studies

William D. Solomon, Associate Professor and W. P. and H. B. White Director of the Center for Ethics and Culture

Jeffrey Speaks, Associate Professor

James P. Sterba, Professor and Fellow in the Joan B. Kroc Institute for International Peace Studies

Leopold Stubenberg, Associate Professor

Meghan Sullivan, Rev. John A. O'Brien Collegiate Assistant Professor

Peter van Inwagen, John Cardinal O'Hara Professor of Philosophy

Ted A. Warfield, Professor

Stephen H. Watson, Professor

Paul J. Weithman, Glynn Family Honors Collegiate Professor of Philosophy

ROMANCE LANGUAGES AND LITERATURES

Chair:

Thomas F. Anderson

Director of Graduate Studies:

John P. Welle

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Location: 343 O'Shaughnessy

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

The Master of Arts

Degree Requirements	
Courses	30 credits
Total	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's degrees in French and Francophone studies, Italian studies, and Iberian and Latin American studies. 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 course work. 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 course work) 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, Chair and Professor of Spanish

Zygmunt Baranski, Notre Dame Professor of Dante and Italian Studies

Maureen B. McCann Boulton, Professor of French

Theodore J. Cachey Jr., Professor of Italian

JoAnn DellaNeva, Associate Dean of the College of Arts and Letters and Professor of French

Julia V. Douthwaite, Professor of French

Sabrina Ferri, Assistant Professor of Italian

Karen Graubart, Carl E. Koch Associate Professor of Latin American History

Rev. Gregory Haake, C.S.C., Assistant Professor of French

Ben A. Heller, Associate Professor of Spanish

Carlos Jáuregui, Associate Professor of Spanish

Diana Jorza, Assistant Professor of Spanish

Encarnación Juárez-Almendros, Associate Professor of Spanish

Joshua Lund, Associate Professor of Spanish

Louis A. MacKenzie Jr., 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 R. Moevs, Associate Professor of Italian

Olivier Morel, Assistant Professor of Romance Languages and Literatures and Film, Television and Theatre

Marisel Moreno-Anderson, Associate Professor of Spanish

Vittorio Montemaggi, Assistant Professor of Religion and Literature

Maria Rosa Olivera-Williams, Professor of Spanish

Catherine Perry, Associate Professor of French

Alison Rice, Associate Professor of French

Denis Robichaud, Assistant Professor, Program of Liberal Studies and

Romance Languages and Literatures

Dayle Seidenspinner-Núñez, Professor of Spanish

Alain P. Toumayan, Professor of French

Juan Vitulli, Associate Professor of Spanish

John P. Welle, Director of Graduate Studies and Professor of Italian

SACRED MUSIC

Program Director:

Margot Fassler

Associate Director of Academics:

Peter Jeffery

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Fax: (574) 631-8958

Location: 248 Malloy Hall

Email: sacredmusic@nd.edu

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

The graduate program in Sacred Music offers the master of sacred music (M.S.M.) and the doctor of musical arts (D.M.A.). Situated in the College of Arts and Letters, the program features major participation from faculty in the Departments of Music and Theology.

The Master of Sacred Music

Degree Requirements	
Courses	48 credits
Total	48 credits
Other	Admission to candidacy
	Master's colloquium

Degree Requirements

	Recital(s) and/or candidacy examination
	Internship

The master of sacred music (M.S.M.) is a 48 credit-hour, two-year program. Students can apply in one of three possible concentrations: choral conducting, organ, or voice.

Every student is placed in the studio of a master teacher in addition to receiving secondary lessons and courses in literature. Half of a student's credit hours are taken in the academic subjects of liturgical music and music history, ritual studies and liturgy, and theory/and or composition.

For specific course and credit requirements, refer to the program handbook.

Internships

M.S.M. students benefit from supervised internships for four semesters; their work may include service in the Basilica of the Sacred Heart or in local churches, working as choristers, or in leadership training with the Notre Dame Children's Choir. In most cases students receive a stipend for this work.

Recitals

Every student gives a recital during each of their two years of study as part of their degree requirement.

Doctor of Musical Arts

Degree Requirements	
Courses	24 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement

Degree Requirements

	Repertory exam
	Doctoral dissertation
	Internship

To complete the doctor of musical arts degree (D.M.A.), students must fulfill at least 24 credit hours of academic coursework, and 36 credits in performance, musicianship, and repertoire relevant to their concentration in organ or choral conducting. Foreign language and some liturgy courses may be taken during the summer school sessions. For specific course and performance requirements by concentration, see the program handbook.

With their advisor's approval, students may also work toward a certificate of specialization in a secondary area of research or creative activity.

Tenured and Tenure-Track Faculty

Kimberly Belcher, Professor of Liturgical Studies

Alexander Blachly, Professor of Music History and Analysis

Christopher Chowrimootoo, Assistant Professor of Liberal Studies

Craig Cramer, Professor of Organ and Director of the Organ Program

Michael Driscoll, Associate Professor of Liturgical Studies

Margot Fassler, Professor of Music History and Analysis and Director of Sacred Music at Notre Dame

Mary Frandsen, Associate Professor of Music History and Analysis

Tala Jarjour, Associate Professor of Music History and Analysis

Peter Jeffery, Professor of Music History and Analysis and Associate Director of Academics

Maxwell Johnson, Professor of Liturgical Studies

John Liberatore, Assistant Professor of Music Theory and Composition

Nancy Menk, Adjunct Professor of Choral Conducting

Pierpaolo Polzonetti, Associate Professor of Music and Liberal Studies

Carmen-Helena Téllez, Professor of Conducting and Director of Choral Conducting Program

THEOLOGY

Chair:

J. Matthew Ashley

Director of Ph.D. Program:

Joseph Wawrykow

Director of M.A. Program:

Catherine Cavadini

Director of M.Div. Program:

Rev. Msgr. Michael Heintz

Director of M.T.S. Program:

David A. Clairmont

Telephone: (574) 631-7811

Fax: (574) 631-4291

Location: 130 Malloy Hall

E-mail: theo.1@nd.edu

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

The Master of Arts

Degree Requirements	
Courses	36 credits
Total	42 credits
Other	Admission to candidacy
	Candidacy examination

The master of arts (M.A.) in theology is a 42 credit-hour terminal degree for individuals who desire advanced theological training. Graduates of this program should be able to serve as theological resources in variety of settings. Recipients of this degree will have received instruction in the classical areas of theological inquiry while acquiring expertise in one.

There are several areas of concentration for the M.A. in theology: general studies, biblical studies, catechesis studies, history of Christianity, liturgical studies, moral theology, systematic theology, and studies in spirituality.

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 set of comprehensive exams, comprised of written and oral exams based on topics chosen by the student and bibliographies approved by the area advisor and the M.A. director.

Those needing a more general and flexible program of studies may pursue a general M.A. program, in which the course of study is planned in consultation with the director. The sole requirement is the inclusion of at least one course in each area of study. This may be of particular interest to those teaching theology in high school who wish to use the M.A. to enhance their effectiveness in teaching in a number of different areas.

For specific course, concentration and exam requirements, see the program handbook.

The Master of Divinity

Degree Requirements	
Courses	60 credits
Total	83 credits
Other	Admission to candidacy
	Field education
	Candidacy examination

The master of divinity (M.Div.) is a professional theological degree designed to prepare students for learned and effective ministry in the Roman 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, and vocational formation to form a comprehensive ministerial curriculum. Thus, the M.Div. aims at a comprehensive, holistic integration of the intellectual, pastoral, human and spiritual dimensions.

The Program of Studies

The program of studies leading to the M.Div. degree encompasses 83 semester credits and normally extends over six semesters.

For specific course and credit requirements, refer to the program handbook.

Field Education

Field education serves as an integral component in the theological and pastoral education of ministry students, as well as to their spiritual formation and vocational preparation. It provides those preparing for ministry varied opportunities for acquiring ministerial

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skills, 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.

Formation

All M.Div. students participate in a program of human and spiritual formation suited to their particular vocational preparation, either as seminarians or as candidates for lay ministry. With the guidance of spiritual directors and formators, students are mentored in the life of faith, in their personal growth and in their vocational discernment. Regular joint formation events are held bringing all constituencies of the program together around shared issues and themes.

The Master of Theological Studies

Degree Requirements	
Courses	48 credits
Total	48 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examination

The Master of Theological Studies (M.T.S.) program trains graduate

students for future doctoral work in the various disciplines within the study of theology. The M.T.S. 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 course work, the M.T.S. also includes participation in the master's colloquium, competency in one modern language, and the completion of a comprehensive oral exam to be given at the end of the second year of course work. The areas of Biblical studies and history of Christianity also have ancient language requirements.

In all there are five areas of concentration in the M.T.S. 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 M.T.S director.

In order to introduce every M.T.S. 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	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The doctoral program requires 42 credit hours of course work. 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 course work 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 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.

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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 course work, 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 course work. 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.

Ph.D. in Theology and Peace Studies Joint Program

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 minimal language requirements of two modern research languages (typically French and German) and one classical language (Latin or Greek).

Tenured and Tenure-Track Faculty

Gary Anderson, Hesburgh Professor of Catholic Theology

Neil Arner, Assistant Professor

J. Matthew Ashley, Chair and Associate Professor

Ann W. Astell, Professor

Yury Avvakumov, Assistant Professor

Kimberly Belcher, Assistant Professor

John Betz, Associate Professor

Rev. Paul F. Bradshaw, Professor

Peter Casarella, Associate Professor

John C. Cavadini, Professor of Theology

David A. Clairmont, Director of the M.T.S. Program and Associate Professor

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

Mary Rose D'Angelo, Associate Professor

Celia Deane-Drummond, Professor

Rev. Michael S. Driscoll, Associate Professor

Rev. John S. Dunne, C.S.C., John A. O'Brien Professor of Catholic Theology

Rev. Virgilio Elizondo, Notre Dame Professor of Pastoral and Hispanic Theology

David Fagerberg, Associate Professor

Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy and Director of Sacred Music

John Fitzgerald, Professor

Robert Gimello, Research Professor

Rev. Daniel G. Groody, C.S.C., Associate Professor

Rev. Gustavo Gutierrez, O.P., John Cardinal O'Hara Professor of Theology

Rev. Msgr. Michael Heintz, Director of the M.Div. Program and Assistant Professional Specialist

M. Catherine Hilker, O.P., Professor

Peter Jeffery, Michael P. Grace II Chair of Medieval Studies and Concurrent Professor

Maxwell Johnson, Professor

M. Cathleen Kaveny, the John P. Murphy Foundation Professor of Law and Professor of Theology

Rev. Paul Kollman, C.S.C., Associate Professor

Robert A. Krieg, Professor

THEOLOGY

Blake Leyerle, Associate Professor and Concurrent Associate Professor of Classics	James C. VanderKam, the John A. O'Brien Professor of Hebrew Scriptures
Bradley J. Malkovsky, Associate Professor	Joseph P. Wawrykow, Director of the Ph.D. Program and Associate Professor
Timothy Matovina, Professor	Todd D. Whitmore, Associate Professor
Rev. Richard P. McBrien, Crowley-O'Brien Professor of Theology	Abraham Winitzer, Assistant Professor
Gerald McKenny, Walter Professor of Theology	Randall C. Zachman, Professor
John Meier, William K. Warren Professor of Theology	
Leon J. Mertensotto, C.S.C., Associate Professor	
Candida R. Moss, Professor	
Francesca Murphy, Professor	
Michael (Tzvi) Novick, Abrams Associate Professor of Jewish Thought and Culture	
Rev. Paulinus I. Odozor, C.S.Sp., Associate Professor	
Cyril O'Regan, Catherine F. Huisking Professor of Theology	
Rev. Hugh Rowland Page Jr., Dean of the First Year of Studies and Associate Professor	
Jean Porter, the John A. O'Brien Professor of Moral Theology	
Gabriel Said Reynolds, Director of Undergraduate Studies Program and Associate Professor	
Maura A. Ryan, Associate Dean of Arts and Letters and Associate Professor of Theology	
Munim Siiry, Assistant Professor	
Alexis Torrance, Assistant Professor	
Eugene C. Ulrich, the Rev. John A. O'Brien Professor of Old Testament Studies	

THE DIVISION OF SCIENCE

APPLIED AND COMPUTATIONAL MATHEMATICS AND STATISTICS

Chair:

Steven Buechler

Director of Ph.D. Program:

Zhiliang Xu

Director of the M.S. Professional Program:

Steven Buechler

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Location: 153 Hurley Hall

E-mail: acms@nd.edu

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

The Master of Science (Professional Degree)

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Admission to candidacy

The professional master of science degree in Applied and Computational Mathematics and Statistics (ACMS) trains students in the mathematical,

statistical and computational tools used in 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. A student applies specifically for admission to this program.

The Master of Science (Ph.D. Track)

Degree Requirements	
Courses	21 credits
Total	30 credits
Other	Admission to candidacy
	Written examination
	Oral examination or faculty recommendation (ACMS Ph.D.)
	Oral examination (non-ACMS Ph.D.)

A student who is working toward a Ph.D. in the Applied and Computational Mathematics and Statistics program 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 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	
Courses	18 credits
Total	60 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

Students in the doctoral program are required to complete at least 18 credits of ACMS courses at the graduate level in the first four semesters of study to remain in good standing. At the discretion of the DGS, at most six credits of graduate level courses transferred from another university may be counted toward the required ACMS course work, for a student without a completed

master's degree. For a student with a completed master's degree, the DGS will determine the number of transferred credits applied to the required ACMS course work.

For additional course-related requirements, refer to the program handbook.

Written examinations are normally taken at the end of the fall semester of the first year, and must be completed by the end of the first year, except for students transferring from another program. The oral candidacy examination, taken after the written candidacy examinations are completed (and before the end of the second year), focuses on an "advanced" topic.

Tenured and Tenure-Track Faculty

Mark Alber, Vincent J. Duncan Family Professor of Applied Mathematics

Steven Buechler, Director of Graduate Studies (M.S. program) and Professor

Martina Bukač, Assistant Professor

Jonathan Hauenstein, Associate Professor

Bei Hu, Associate Chair and Professor

Alexandra Jilkine, Assistant Professor

Ick Hoon Jin, Assistant Professor

Jun Li, Assistant Professor

Alan Lindsay, Assistant Professor

Fang Liu, Assistant Professor

Robert Rosenbaum, Assistant Professor

Andrew Sommese, Associate Chair and Vincent J. Duncan and Annamarie Micus Duncan Professor of Mathematics

Zhiliang Xu, Director of Graduate Studies (Ph.D. program) and Associate Professor

Yongtao Zhang, Director of Undergraduate Studies and Associate Professor

BIOLOGICAL SCIENCES

Chair:

Crislyn D'Souza-Schorey

Director of Graduate Studies:

Hope Hollocher

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Fax: (574) 631-7413

Location: 100 Galvin Life Sciences Center

E-mail: biosadm@nd.edu

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

The Master of Science

Degree Requirements	
Courses	15 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

The master's degree is a 30-credit-hour program requiring the satisfactory completion of a minimum of 15 credit hours of course work, passing a research proposal review, and completing a suitable master's thesis.

The Doctor of Philosophy

Degree Requirements	
Courses	24 credits
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

For the degree of doctor of philosophy, the student is expected to complete a 60-credit-hour requirement. This is composed of at least 24 credit hours of course work and the remainder as dissertation research. The student must pass a comprehensive 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, Clare Boothe Luce Program Assistant Professor

Gary E. Belovsky, Professor and Martin J. Gillen Director of the Environmental Research Center

Nora J. Besansky, Professor

Sunny K. Boyd, Professor

Patricia Champion, Assistant Professor

Frank H. Collins, George and Winifred Clark Professor

Crislyn D'Souza-Schorey, Notre Dame Professor and Department Chair

Giles E. Duffield, Associate Professor
 John G. Duman, Martin J. Gillen
 Professor
 Jeffrey L. Feder, Professor
 Michael T. Ferdig, Professor
 Malcolm J. Fraser Jr., Rev. Julius A.
 Nieuwland, C.S.C. Professor
 Paul R. Grimstad, Emeritus Professor
 Kasturi Haldar, Rev. Julius A. Nieuw-
 land, C.S.C. Professor and James
 C. Parsons and Carrie Ann Quinn
 Director of the Center for Rare
 and Neglected Diseases
 Ronald A. Hellenthal, Emeritus Pro-
 fessor
 Reginald Hill, Assistant Professor
 Hope Hollocher, Director of Graduate
 Studies and Associate Professor
 David R. Hyde, Professor and Rev.
 Howard J. Kenna, C.S.C., Me-
 morial Director of the Zebrafish
 Research Center
 Stuart Jones, Assistant Professor
 Charles F. Kulpa Jr., Emeritus Profes-
 sor
 Gary A. Lamberti, Professor
 Shaun Lee, Assistant Professor
 Lei Li, Associate Professor
 David M. Lodge, Ludmilla F., Stephen
 J., and Robert T. Galla Professor
 Mary Ann McDowell, Associate Pro-
 fessor
 Jason S. McLachlan, Associate Profes-
 sor
 Edwin Michael, Professor
 Miguel Morales, Assistant Professor
 Joseph E. O'Tousa, Professor

Athanasia D. Panopoulos, Elizabeth
 and Michael Gallagher Assistant
 Professor
 Alex T. Perkins, Assistant Professor
 Michael Pfrender, Associate Professor
 Matthew J. Ravosa, Professor
 Adrian Rocha, Assistant Professor
 Jeanne Romero-Severson, Professor
 Zachary T. Schafer, Coleman Assistant
 Professor of Cancer Biology
 Jeffrey S. Schorey, Professor
 Robert A. Schulz, University of Notre
 Dame Professor
 David W. Severson, Professor
 Zainulabeuddin Syed, Assistant Profes-
 sor
 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 Mi-
 chael Gallagher Assistant Professor
 Siyuan Zhang, Assistant Professor and
 Nancy Dee Professor of Cancer
 Research

Concurrent Faculty

Holly V. Goodson, Concurrent Associ-
 ate Professor, Molecular and Cell
 Biology and Biophysics
 Kristin Shrader-Frechette, O'Neill
 Family Professor of Philosophy and
 Concurrent Professor of Biological
 Sciences
 Joshua Shrout, Concurrent Assistant
 Professor

M. Sharon Stack, Ann F. Dunne and
 Elizabeth M. Riley Director of the
 Harper Cancer Research Institute,
 and Concurrent Professor of Bio-
 logical Sciences

CHEMISTRY AND BIOCHEMISTRY

Chair:

Kenneth W. Henderson

Co-Directors of Graduate Studies:

Brandon Ashfeld

Steven A. Corcelli

Telephone: (574) 631-0977

Fax: (574) 631-6652

Location: 251 Nieuwland Science

E-mail: chemistry@nd.edu or

biochemistry@nd.edu

Web: <http://chemistry.nd.edu> or

<http://biochemistry.nd.edu>

The Master of Science

Degree Requirements	
Courses	18 credits
Total	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, students who have not passed the academic and research progress (ARP) examination in their third semester may be eligible to receive a M.S. degree.

CHEMISTRY AND BIOCHEMISTRY

At the discretion of the advisor and only with the advisor's financial support, a student who fails the exam and 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 course work 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.

The Doctor of Philosophy

Degree Requirements	
Courses	18 credits
Total	90 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 course work prior to the end of their third semester. A combined total of 90 credits are required; this total includes all courses taken, including not only instructional

coursework, but research, seminars, directed readings, etc. The program may accept course work 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.

Tenured and Tenure-Track Faculty

Brandon Ashfeld, Associate Professor and Co-Director of Graduate Studies

Brian M. Baker, Professor

Paul Bohn, Arthur J. Schmitt Professor

Seth N. Brown, Professor

Jon P. Camden, Associate Professor

Ian C. Carmichael, Professor and Director of Radiation Laboratory

Francis J. Castellino, Dean Emeritus of Science, the Kleiderer-Pezold Professor of Biochemistry, and Director of the Keck Center for Transgene Research

Patricia L. Clark, Rev. John Cardinal O'Hara, C.S.C. Professor

Steven A. Corcelli, Associate Professor and Co-Director of Graduate Studies

Xavier Creary, the Charles L. Huisiking Sr. Professor of Chemistry

Norman Dovichi, Grace-Rupley Professor

Haifeng Gao, Assistant Professor

J. Daniel Gezelter, Associate Professor

Holly V. Goodson, Professor

Gregory V. Hartland, Professor

Paul Helquist, Professor

Kenneth W. Henderson, Professor and Chair

Paul W. Huber, Professor

Amanda Hummon, Walther Cancer Institute Assistant Professor of Biochemistry

Vlad M. Iluc, Assistant Professor

Prashant V. Kamat, John A. Zahm Professor of Science

S. Alex Kandel, Associate Professor

M. Kenneth Kuno, Associate Professor

A. Graham Lappin, Professor

Marya Lieberman, Associate Professor

Laurie Littlepage, Campbell Family Assistant Professor of Cancer Research

Marvin J. Miller, the George and Winifred Clark Professor of Chemistry

Shahriar Mobashery, Navari Family Professor in Life Sciences

Jeffrey W. Peng, Associate Professor

Zachary Schultz, Assistant Professor

Anthony S. Serianni, Professor

Slavi C. Sevov, Professor

Bradley D. Smith, Emil T. Hofman
Professor of Chemistry and Biochemistry

Sharon Stack, Professor and Ann
F. Dunne and Elizabeth Riley
Director, Harper Cancer Research
Institute

Richard E. Taylor, Professor

Olaf G. Wiest, Professor

ENGINEERING, SCIENCE & TECHNOLOGY ENTREPRENEURSHIP EXCELLENCE MASTER'S PROGRAM

Program Director:

David Murphy

Telephone: (574) 807-0963

Location: 1400 E. Angela Blvd.

E-mail: esteem@nd.edu

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

The Master of Science

Degree Requirements	
Courses	35 credits
Total	37.5 credits
Other	Capstone thesis project
	Technology examination
	Capstone thesis defense

The University of Notre Dame's ESTEEM Program is an 11-month master of science program developed as a joint program of the College of Science, College of Engineering, and Mendoza College of Business. The

goal of the ESTEEM program is for students from a technical background to apply their technical skills paired with the entrepreneurial curriculum provided through the program to advance a technology and develop a comprehensive commercialization plan.

The program's innovative curriculum includes 22 credit hours of business courses covering such topics as accounting and finance, sales and marketing, business model canvas, launch strategy, leadership, project management, product development, and ethics. These courses have been constructed to specifically meet the needs of ESTEEM students.

In addition to business courses, students are expected to complete a minimum of 6 credit hours of science and/or engineering electives intended to deepen the ESTEEM student's technical foundation, and 7 credit hours of the unique capstone thesis project.

INTEGRATED BIOMEDICAL SCIENCES

Director of Graduate Studies:

Holly Goodson

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Fax: (574) 631-6652

Location: 451 Stepan Chemistry

E-mail: ibms@nd.edu

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

The Doctor of Philosophy

Degree Requirements	
Courses	24 credits
Total	60 credits

Degree Requirements	
Other	Laboratory rotations (3)
	Orig. research proposal exam
	Candidacy examinations
	Doctoral dissertation

The Integrated Biomedical Sciences 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 seven 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 course work. 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 course work 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.

MASTER OF SCIENCE IN GLOBAL HEALTH

Director of Global Health Training:

Katherine Taylor

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Fax: (574) 631-7413

Location: Galvin Life Science Center

E-mail: ghms@nd.edu

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

The Master of Science (Professional Degree)

Degree Requirements	
Courses	32 credits
Total	32 credits
Other	6–8 weeks of field experience
	Capstone project

The master of science in global health (M.S.) professional degree is normally completed within one calendar year. The program requires course work to be completed over two semesters, followed by 6–8 weeks of field experience in a resource-poor location where access to health care is limited. Finally, students are required to submit and present a capstone project, which is a scholarly report based on original research or literature-based research.

MASTER OF SCIENCE IN PATENT LAW

Director of Graduate Studies:

Karen Deak

Telephone: (574) 631-6695

Location: 1190 Eck Hall of Law

E-mail: kdeak@nd.edu

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

The Master of Science (Professional Degree)

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Capstone project
	Mock Patent Bar examination

In the one-year Master of Science in Patent Law program, students learn about the newest developments in the patent legal world through a hands-on curriculum, taught by currently practicing patent attorneys and agents.

In their capstone project, students work through the entire process of drafting a real, fileable patent application, using a Notre Dame-owned invention. They have access to faculty mentors (the inventors) and outside mentors (patent attorneys and agents who practice in their technical field) for both scientific and legal help with the process.

MATHEMATICS

Chair:

Michael Gekhtman

Director of Graduate Studies:

Peter Cholak

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Fax: (574) 631-6579

Location: 255 Hurley Hall

E-mail: math@nd.edu

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

The Master of Science

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations

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	
Courses	24 credits
Total	30 credits
Other	Candidacy examinations
	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	
Courses	36 credits (basics and topics)
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

Students in the doctoral program are expected to complete at least 36 credit

hours of course work (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, Assistant Professor

Mark Behrens, Professor and John and Margaret McAndrews Chair

Peter Cholak, Director of Graduate Studies and Professor

Francis X. Connolly, Emeritus

Jeffrey Diller, Professor

William G. Dwyer, Emeritus

Matthew J. Dyer, Associate Professor

Samuel Evens, Associate Professor

Leonid Faybusovich, Professor

David Galvin, Associate Professor

Michael Gekhtman, Chair and Professor

Karsten Grove, the Rev. Howard J. Kenna, C.S.C Professor

Matthew Gursky, Professor

Alexander J. Hahn, Professor

Brian Hall, Professor

Qing Han, Professor

A. Alexandrou Himonas, Professor

Richard Hind, Professor

Andrei Jorza, Assistant Professor

Julia F. Knight, the Charles L. Huisiking Professor of Mathematics

François Ledrappier, Emeritus

Arthur Lim, Associate Professor of the Practice

Sonja Mapes-Szekelyhidi, Assistant Professor of the Practice and Director of Undergraduate Studies

Juan C. Migliore, Professor

Gerard K. Misiolek, Professor

Liviu Nicolaescu, Professor

Anne Pilkington, Associate Professor of the Practice

Anand Pillay, William J. Hank Family Professor

Claudia Polini, Rev. John Cardinal O'Hara, C.S.C. Professor of Mathematics

Caudiu Raicu, Assistant Professor

Mei-Chi Shaw, Professor

Roxana Smarandache, Associate Professor

Brian Smyth, Professor

Dennis M. Snow, Professor

Nancy K. Stanton, Professor

Sergei Starchenko, Professor

Stephan A. Stolz, Professor

Gábor Székelyhidi, Associate Professor

Laurence R. Taylor, Professor

E. Bruce Williams, Emeritus

Frederico J. Xavier, Emeritus

M.D./PH.D. JOINT DEGREE PROGRAM

Director of Medical Education:

Stacey Jackson

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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 required of all applicants. The parallel applications are coordinated and tracked by the IUSM – SB which serves as the central office for the combined degree program. Representatives from Notre Dame and the I.U. School of Medicine monitor and oversee the program.

Tenured and Tenure-Track Faculty

David Boone, Associate Professor

Karen Cowden Dahl, Assistant Professor

Richard Dahl, Assistant Professor

Jenifer Prosperi, Assistant Professor

Joseph Prahlow, Professor

Molly Duman Scheel, Associate Professor

Margaret Schwarz, Professor

Roderich Schwarz, Professor

Patrick Sheets, Assistant Professor

Robert V. Stahelin, Associate Professor

PHYSICS

Chair:

Christopher F. Kolda

Director of Graduate Studies:

J. Christopher Howk

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Location: 225 Nieuwland Science Hall

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

The Master of Science

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations

The graduate program 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; it involves satisfactory completion of graduate course work without any thesis requirement.

The master of science non-research program requires 30 credit hours of approved course work and the passing of an oral master's examination. Each program of course work is chosen in consultation with a faculty advisor.

The Doctor of Philosophy

Degree Requirements	
Courses	33 credits
Total	60 credits

PHYSICS

Degree Requirements	
Other	Preliminary examination
	Candidacy examinations
	Doctoral dissertation

Requirements for the Ph.D. include a total of 60 credit hours in courses and research. For specific course requirements, see the program handbook.

There is no foreign language requirement for a Ph.D. in physics.

In addition to course work, 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 end of the second year. The candidacy examination is typically taken in the third year, after course work is complete.

To remain in good standing, students are required to: maintain a 3.0 grade point average, pass the qualifying examination by the end of the second year, 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 and may include summer session.

Tenured and Tenure-Track Faculty

Tan Ahn, Assistant Professor

Mark Alber, Concurrent Professor

Ani Aprahamian, Frank M. Freimann Professor of Physics

Dinshaw Balsara, Associate Professor

Dan Bardayan, Associate Professor

Timothy Beers, Notre Dame Chair in Astrophysics, Professor

Ikaros I. Bigi, the Grace-Rupley II Professor of Physics

Maxime Brodeur, Assistant Professor

Bruce A. Bunker, Professor

Mark A. Caprio, Associate Professor

Philippe A. Collon, Associate Professor and Associate Chair and Director of Undergraduate Studies

Manoel Couder, Assistant Professor

Gregory P. Crawford, Professor, Vice President, and Associate Provost

Justin R. Crepp, Frank M. Freimann Assistant Professor

Antonio Delgado, Associate Professor

Malgorzata Dobrowolska-Furdyna, Rev. John Cardinal O'Hara, C.S.C. Professor of Physics, and Associate Dean for Undergraduate Students, College of Science

Morten R. Eskildsen, Professor

Stefan G. Frauendorf, Professor

Jacek K. Furdyna, the Aurora and Tom Marquez Professor of Physics and Fellow of the Nanovic Institute for European Studies

Umesh Garg, Professor

Peter M. Garnavich, Professor

Kenjiro K. Gomes, Frank M. Freimann Assistant Professor

Michael D. Hildreth, Professor

Jay Christopher Howk, Associate Professor, Associate Chair, and Director of Graduate Studies

Anthony K. Hyder, Professor

Boldizsár Jankó, Professor and Director of the Institute for Theoretical Sciences

Colin P. Jessop, Professor

Christopher F. Kolda, Professor and Department Chair

Kevin A. Lannon, Associate Professor

John M. LoSecco, Professor

Adam Martin, Assistant Professor

Grant J. Mathews, Professor and Director of the Center for Astrophysics

Kathie E. Newman, Professor

Jeffrey W. Peng, Concurrent Associate Professor

Sylwia Ptasínska, Aurora and Thomas Marquez Assistant Professor

Terrence W. Rettig, Professor

Randal C. Ruchti, Professor

Steven T. Ruggiero, Professor

Jonathan R. Sapirstein, Professor

Anna Simon, Assistant Professor

Rebecca Surman, Associate Professor

Carol E. Tanner, Professor

Zoltán Toroczka, Professor and Director of the Interdisciplinary Center for Network Science and Applications

Dervis Can Vural, Assistant Professor

Mitchell R. Wayne, 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

THE DIVISION OF SOCIAL SCIENCES

ANTHROPOLOGY

Chair:

Agustín Fuentes

Director of Graduate Studies:

Ian Kuijt

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Fax: (574) 631-5760

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

The Master of Arts

Degree Requirements	
Courses	30 credits
Total	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
	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. 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. The dissertation and oral defense are the final steps in the Ph.D. requirement with the goal of completing all requirements within five years.

For specific course, field work, and exam requirements, see the program handbook.

Tenured and Tenure-Track Faculty

Maurizio Albahari, Assistant Professor

Jada Benn Torres, Assistant Professor

Susan D. Blum, Professor

Catherine Bolten, Assistant Professor

Alex E. Chavez, Assistant Professor

Meredith S. Chesson, Associate Professor

Agustín Fuentes, Chair, Professor

Patrick D. Gaffney, C.S.C., Associate Professor

Lee Gettler, Assistant Professor

Donna Glowacki, Associate Professor

Ian Kuijt, Professor

James McKenna, Professor

Carolyn Nordstrom, Professor

Rahul Oka, Assistant Professor

Natalie Porter, Assistant Professor

Mark Schurr, Professor

Susan Guise Sheridan, Associate Professor

Vania Smith-Oka, Associate Professor

ECONOMICS

ECONOMICS

Chair:

William N. Evans

Director of Graduate Studies:

Timothy Fuerst

Telephone: (574) 631-7698

Fax: (574) 631-4783

Location: 434 Flanner

E-mail: jtate@nd.edu

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

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 course work 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 course work, 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 course work 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 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 who do not attain a

Ph.D. pass in either examination have one opportunity for a retake later that summer, typically in August. Failure to pass both 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 can be taken no later than one calendar year prior to defense of the dissertation.

Tenured and Tenure-Track Faculty

Simeon Alder, Assistant Professor

Rudiger Bachmann, Associate Professor

Christiane Baumeister, Assistant Professor

Wyatt Brooks, Assistant Professor

Kasey Buckles, Brian and Jeannelle Brady Associate Professor

Christopher Cronin, Assistant Professor

Kevin Donovan, Assistant Professor

Kirk B. Doran, Assistant Professor

William N. Evans, Chair and the Keough-Hesburgh Professor of Economics

Felix Feng, Assistant Professor

Timothy Fuerst, the William and Dorothy O'Neill Professor of Economics and Director of Graduate Studies

Antoine Gervais, Assistant Professor

Chloe Gibbs, Assistant Professor

Thomas A. Gresik, Professor

Daniel M. Hungerman, the Stepan Family Associate Professor of Economics

Terrence Johnson, Assistant Professor

Richard A. Jensen, the Gilbert Schaefer Professor of Economics

Joseph Kaboski, the David F. and Erin M. Seng Foundation Professor of Economics

William H. Leahy, Professor

Byung-Joo Lee, Associate Professor

Ethan Lieber, Assistant Professor

Steven Lugauer, Assistant Professor

Nelson C. Mark, the DeCrane Professor of International Economics

Michael J. Pries, Associate Professor

Kali P. Rath, Associate Professor

Eric Sims, the Michael P. Grace II Associate Professor of Economics

James X. Sullivan, Associate Professor

Zachary Strangebye, Assistant Professor

Jeffrey Thurk, Assistant Professor

Christopher J. Waller, Professor

Abigail Wozniak, Associate Professor

EDUCATION

Director of the M.A. Program:

Christian M. Dallavis

Director of the M.Ed. Program:

Sister Gail Mayotte, SASV

Director of Graduate Studies:

James M. Frabutt

Telephone: (574) 631-7052

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Location: 107 Carole Sandner Hall

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(M.Ed.) ace.1@nd.edu

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

The Master of Arts in Educational Leadership

Degree Requirements	
Courses	42 credits
Total	42 credits
Other	Administrative internship
	Program portfolio
	School Leaders Licensure Assessment

The master of arts in educational leadership (M.A.) 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 participants are provided with regular opportunities to interact with a national community of scholars and experts in the field of Catholic education. Participants may be eligible for state licensure if additional state requirements are met, including successful completion of the Praxis II School Leaders Licensure Assessment.

The Mary Ann Remick Leadership Program is designed to prepare participants to become school leaders and meet the professional standards for principalship as defined by the Rules for Educator Preparation and Accountability (REPA) and the Indiana Professional Standards Board (IPSB). The program is, therefore, standards-based, and all course activities and requirements are designed with this in mind.

M.A. students primarily attend core courses during the summer. A total of 44 credit hours of course work over a 25-month span are required, with an overall grade point of at least 3.0. For specific details regarding course requirements, consult the program handbook.

During the academic years between the first two summer sessions, each student 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 their duties with the school, students participate in distance learning courses directed at the applied practice of 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	
Courses	37 credits 41 credits (elementary focus)
Total	37 credits 41 credits (elementary focus)
Other	Supervised teaching
	Teaching portfolio

The master of education (M.Ed.) program is available only to students enrolled in the Alliance for Catholic Education's Teaching Fellows program. Students in this program work toward licensure, consistent with the standards in the state of Indiana, in each of the following areas: middle childhood (elementary education), early adolescence (middle school), adolescence and young adulthood (high school), English language arts, social studies, science, mathematics, and foreign languages. Like most teacher accreditation programs at the master's level, content-area courses must be completed before entering the master's program, which provides education course work only.

A total of 37 (41 for elementary) credit hours of course work and teaching experience are required, with an overall grade point of at least 3.0. Half of the course work will occur in two summer sessions, with 10 to 13 credits earned in each.

For specific details regarding course requirements, consult the program handbook.

M.Ed. students must complete two years of service in teaching with supervised teaching grades of not less than 3.0. The teaching portfolio is evaluated by both University faculty and master teachers, who provide recommendations for continued development. Students will acquire teaching practice both in South Bend-area elementary and secondary schools and at an assigned Catholic school in the southern United States. Throughout the two years, supervision is accomplished by measuring students against professional performance indicators while students build a teaching portfolio documenting their progress in developing as a teacher.

PEACE STUDIES

Chair:

Ruth Abbey

Director of Doctoral Studies:

Asher Kaufman

Director of the Master's Program:

Susan St. Ville

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Fax: (574) 631-6973

Location: 100 Hesburgh Center

E-mail: kroc-admissions.1@nd.edu

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

The Master of Arts

Degree Requirements	
Courses	36 credits
Total	46 credits
Other	Foreign language requirement
	Field experience and capstone paper (option 1); or
	Master's thesis (option 2)

The interdisciplinary master of arts (M.A.) degree program in peace studies is a rigorous academic program offered through the Joan B. Kroc Institute for International Peace Studies. Students are expected to complete at least 36 credits of course work in pursuit of the M.A., and must select a major and a minor professional track: conflict analysis and transformation; policy analysis and political change; or organizational management and leadership. All students are required to participate in the year-long Reflective Practice and Professional Development Seminar to enhance the formation of professional identity.

A key component of the Kroc M.A. program is the five-month field ex-

perience in which students integrate theories of peacebuilding with work in non-governmental organizations and other institutions concerned with conflict resolution, peace studies, economic development, human rights or justice.

A small number of students choose to write a master's thesis instead of pursuing an international internship. These students remain on campus during both academic years and research and write a peace studies thesis under the supervision of a thesis director in their second year.

All students enroll in the Master's Colloquium on Effective Peacebuilding after returning from the field in their final semester. Conducted as a seminar, the colloquium provides the opportunity to reflect on the field experience in light of peace studies theory. Students returning from the field are also required to enroll for the M.A. Capstone course in which they will write their final M.A. project.

For additional details regarding course, examination, and service requirements, consult the program handbook.

The Doctor of Philosophy

The Kroc Institute for International Peace Studies at the University of Notre Dame offers a Ph.D. in peace studies in partnership with Notre Dame's 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 peace studies program will be fully credentialed in one

PEACE STUDIES

of the five associated disciplines, plus be fully acquainted with the research questions and findings of interdisciplinary peace research.

Ph.D. in Anthropology and Peace Studies

Degree Requirements	
Courses	36 credits
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

The requirements for the Ph.D. in anthropology and peace studies normally include: a minimum of 21 hours of courses in anthropology, and 18 hours of courses in peace studies; proficiency in English and one other language; a minimum of two research seminar papers, at least one of which will be an article of publishable quality and submitted to a scholarly publication; comprehensive examinations in peace studies and qualifying examinations in anthropology; an application for external funding for scholarly research; five semesters of research and teaching assistantships in anthropology and peace studies; and a dissertation of original research.

In addition to the peace studies comprehensive exam, students in anthropology must also pass the qualifying exams in anthropology. The examination is in two parts, written and oral, with the oral occurring within ten days of successful passage of the written. Examiners should be members of the Notre Dame Anthropology Department's tenured and tenure-track faculty or, in the case of a field outside of the discipline of anthropology, a member of the tenured and tenure-track faculty in another department at Notre Dame.

For additional details regarding course, examination, and service requirements, consult the program handbook.

Ph.D. in History and Peace Studies

Degree Requirements	
Courses	48 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The requirements for the Ph.D. in History and Peace Studies include: a minimum of 48 course credits; proficiency in English and one or two other languages (depending on the specialty within history); two history research seminar papers; a master's paper of publishable quality (not necessarily an official master's thesis); comprehensive exams in five areas; and a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

Students take five comprehensive exams, three in history and two in peace studies; alternately, one of the five exam fields may be a crossover field involving both disciplines and directed by a history professor who is a Kroc fellow. Of the primary history fields, two must be in the student's major area (United States, modern Europe, Latin America, or medieval), and the third will be created by the student in consultation with and approval of the two directors of graduate studies. At least one of the two peace studies fields will be based on one of the peace studies foundational courses.

Ph.D. in Political Science and Peace Studies

Degree Requirements	
Courses	60 credits
Total	99 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

In this program, basic requirements include a minimum of 60 course credits; proficiency in English and one other language; a master's paper of publishable quality (although this would not necessarily be an official master's thesis); a comprehensive examination in two areas plus a third area of course work; and a dissertation of original research.

Students complete all existing regular political science requirements, take peace studies courses as the third area of specialization, plus three additional peace studies courses.

For specific details regarding course requirements, consult the program handbook.

Ph.D. in Psychology and Peace Studies

Degree Requirements	
Courses	60 credits
Total	93 credits
Other	Foreign language requirement
	Candidacy examinations
	Master's thesis
	Doctoral dissertation

In this program, basic requirements normally include: a minimum of 60 course credits; proficiency in English and one other language; an empirical master's thesis; a comprehensive examination in developmental psychology

PEACE STUDIES

(or other mutually agreed upon field in the department); and a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

Ph.D. in Sociology and Peace Studies

Degree Requirements	
Courses	57 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

Students must earn a minimum of 57 course credits; demonstrate proficiency in English and one other language; write a master's paper of publishable quality; pass comprehensive examinations in two specialty areas (one of which must be a substantive area in sociology—which does not include the methods and statistics area or the theory area); and write a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

Ph.D. in Theology and Peace Studies

Degree Requirements	
Courses	42 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The combined theology and peace studies program 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. include: a minimum of 42 course credits; and proficiency in two modern research languages (typically French and German) and one classical language (Latin or Greek).

For specific details regarding course requirements, consult the program handbook.

Core Faculty

Scott Appleby, John M. Regan Jr. Director; Professor of History

Catherine Bolten, Assistant Professor of Anthropology and Peace Studies

David Cortright, Director of Policy Studies

Hal Culbertson, Executive Director

Larissa Fast, Assistant Professor of Conflict Resolution

Tanisha Fazal, Associate Professor of Political Science and Peace Studies

Gary Goertz, Professor of Political Science and Peace Studies

Robert C. Johansen, Professor Emeritus of Political Science

Madhav Joshi, Research Assistant Professor, Associate Director of the Peace Accords Matrix

Emmanuel Katongole, Associate Professor of Theology and Peace Studies

Asher Kaufman, Director of the Ph.D. Program and Associate Professor of History and Peace Studies

John Paul Lederach, Professor of International Peacebuilding

George A. Lopez, Rev. Theodore M. Hesburgh, C.S.C., Professor Emeritus of Peace Studies

Erik Melander, Senior Research Fellow

Laura Miller, Assistant Professor of Psychology and Peace Studies

Ann Mische, Associate Professor of Sociology and Peace Studies

Mary Ellen O'Connell, Research Professor of International Dispute Resolution

A. Rashied Omar, Research Scholar of Islamic Studies and Peacebuilding

Atalia Omer, Associate Professor of Religion, Conflict, and Peace Studies

Daniel Philpott, Professor of Political Science

Gerard F. Powers, Director of Catholic Peacebuilding Studies

Patrick Regan, Professor of Political Science and Peace Studies

Theresa Ricke-Kiely, Associate Director of the Master's Program

Jason A. Springs, Assistant Professor of Religion, Ethics and Peace Studies

Susan M. St. Ville, Director of the Master's Program

Ernesto Verdeja, Associate Professor of Political Science and Peace Studies

Peter Wallensteen, Richard G. Starmann Sr. Research Professor of Peace Studies

POLITICAL SCIENCE

POLITICAL SCIENCE

in the major field, and a minimum of nine in a second field.

Chair:

Michael C. Desch

Director of Graduate Studies:

Matthew Hall

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Fax: (574) 631-4405

Location: 217 O'Shaughnessy

E-mail: psdgs@nd.edu

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

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.

The Master of Arts

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

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 master of arts (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 course work is required

The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Candidacy examinations
	Foreign language requirement
	Doctoral dissertation

Ph.D. students are expected to complete at least 48 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 four 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

Ruth Abbey, Professor

Peri E. Arnold, Professor

Sotirios A. Barber, Professor

Jaimie Bleck, Assistant Professor

Eileen M. Hunt Botting, Associate Professor

David E. Campbell, Professor

Susan Collins, Associate Professor

Michael Coppedge, Professor

Sarah Daly, Assistant Professor

Darren Davis, Professor

Patrick Deneen, Associate Professor

Michael C. Desch, Professor and Chair

Rev. Robert Dowd, C.S.C., Assistant Professor

Amitava Krishna Dutt, Professor

Tanisha Fazal, Associate Professor

Luis Ricardo Fraga, Professor

Gary Goertz, Professor

Andrew Gould, Associate Professor

Alexandra Guisinger, Assistant Professor

Matthew Hall, Assistant Professor and Director of Graduate Studies

Gary Hollibaugh, Assistant Professor

Victoria Tin-bor Hui, Associate Professor

Debra Javeline, Associate Professor

Mary M. Keys, Associate Professor

Geoffrey C. Layman, Professor

Dan Lindley, Associate Professor

Scott Mainwaring, Eugene Conley Professor of Political Science and Director of the Kellogg Institute for International Studies

A. James McAdams, William M. Scholl Professor of International Affairs

Rev. Sean McGraw, C.S.C., Assistant Professor

Vincent Phillip Munoz, Associate Professor

David Nickerson, Associate Professor

Daniel Philpott, Professor

Dianne Pinderhughes, President's Distinguished Professor and Full Professor in the Department of Africana Studies

Emilia Justyna Powell, Assistant Professor

Benjamin Radcliff, Professor

Ricardo Ramirez, Associate Professor

Patrick Regan, Professor

Sebastian Rosato, Associate Professor

Rev. Timothy R. Scully, C.S.C., Professor

Guillermo Trejo, Associate Professor

Ernesto Verdeja, Assistant Professor

Dana Villa, Packey J. Dee Professor of Political Theory

Christina Wolbrecht, Associate Professor

Catherine H. Zuckert, Nancy Reeves Dreux Professor

Michael P. Zuckert, Nancy Reeves Dreux Professor

PSYCHOLOGY

Chair:

Daniel K. Lapsley

Director of Graduate Studies:

David Watson

Telephone: (574) 631-7675

Fax: (574) 631-8883

Location: 118 Hagggar Hall

E-mail: db.watson@nd.edu

Web: <http://www.nd.edu/~psych>

The graduate program in psychology is divided into 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	
Courses	24 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

The master of arts requires a minimum of 24 hours of course work and completing and defending a research-based master's thesis.

For specific course requirements, consult the program's handbook.

The Doctor of Philosophy

Degree Requirements	
Courses	30 credits
Total	60 credits
Other	Candidacy examinations
	Practicum (as appropriate)
	Doctoral dissertation
	Internship (clinical area)

To fulfill the doctoral degree requirements, students must complete a total of 60 or more credit hours, and may be required to complete a practicum when appropriate. Preliminary examinations and the oral dissertation proposal defense 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 are also required to complete an internship.

For additional details regarding courses and area-specific requirements, consult the program handbook.

Tenured and Tenure-Track Faculty

Cognition, Brain, and Behavior Area

James R. Brockmole, Associate Professor

Laura A. Carlson, Professor and Vice President, Associate Provost, Dean of the Graduate School, and Professor

Charles R. Crowell, Associate Professor

Kathleen M. Eberhard, Associate Professor and Director of the Cognition, Brain, and Behavior Area

Bradley S. Gibson, Professor

Jill Lany, Assistant Professor

Nicole M. McNeil, Associate Professor

Jessica Payne, Associate Professor and the Nancy O'Neill Collegiate Chair in Psychology

Gabriel A. Radvansky, Professor

Michelle M. Wirth, Assistant Professor

Clinical Area

Thomas G. Burish, Professor and Provost

Lee Anna Clark, the William J. & Dorothy K. O'Neill Professor in Psychology and Director of the Clinical Area

Gerald J. Haeffel, Associate Professor

Anita E. Kelly, Professor

Thomas V. Merluzzi, Professor and Director of the Institute for Scholarship in the Liberal Arts

Laura Miller-Graff, Assistant Professor

Scott M. Monroe, the William K. Warren Foundation Professor of Psychology

Jessica Payne, Associate Professor and the Nancy O'Neill Collegiate Chair in Psychology

Anne D. Simmons, Professor

David A. Smith, Professor

Kristin Valentino, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

David Watson, the Andrew J. McKenna Family Professor of Psychology and Director of Graduate Studies

Lira Yoon, Associate Professor

Developmental Area

Cindy S. Bergeman, Professor

Julia M. Braungart-Rieker, Professor, Mary Hesburgh Flaherty and James F. Flaherty Collegiate Chair, and Director of the William J. Shaw Center for Children and Families

Mark Cummings, Professor and the Notre Dame Chair in Psychology, and Fellow in the Joan B. Kroc Institute for International Peace Studies

Jeanne D. Day, Professor

Dawn M. Gondoli, Associate Professor and Director of the Developmental Area

Jill Lany, Assistant Professor

Daniel K. Lapsley, Professor and Department Chair, and Fellow of the Institute for Educational Initiatives and of the Center for Social Concerns

Nicole M. McNeil, Associate Professor

Darcia Narváez, Professor and Fellow of the Institute for Educational Initiatives, Institute of Latino Studies, the John J. Reilly Center for Science, Technology and Values, and of the Joan B. Kroc Institute for International Peace Studies

Kristin Valentino, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

Thomas L. Whitman, Professor Emeritus

Quantitative Area

Ying (Alison) Cheng, Associate Professor

Gitta H. Lubke, the John Cardinal O'Hara, C.S.C. Associate Professor of Psychology and Director of the Quantitative Area

Scott E. Maxwell, Professor and the Matthew A. Fitzsimons Chair

Lijuan (Peggy) Wang, Associate Professor

Ke-Hai Yuan, Professor

Guangjian Zhang, Associate Professor

Zhiyong (Johnny) Zhang, Associate Professor

SOCIOLOGY

Chair:

Rory McVeigh

Director of Graduate Studies:

Jessica Collett

Telephone: (574) 631-6585

Fax: (574) 631-9238

Location: 810 Flanner Hall

E-mail: dgsoc@nd.edu

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

The Master of Arts

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

The master of arts (M.A.) degree requires 30 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.

SOCIOLOGY

For specific details regarding course and candidacy requirements, consult the program handbook.

The Doctor of Philosophy

Degree Requirements	
Courses	45 credits
Total	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

Megan Andrew, Assistant Professor

Mark Berends, Professor and Director of the Center for Research on Educational Opportunity

Kraig Beyerlein, Assistant Professor

Jorge A. Bustamante, Eugene Conley Professor of Sociology

William J. Carbonaro, Associate Professor

Gilberto Cardenas, Professor

Kevin J. Christiano, Associate Professor

Jessica Collett, Director of Graduate Studies and Associate Professor

Larissa Fast, Assistant Professor

Robert Fishman, Professor

David Gibson, Associate Professor

David S. Hachen, Jr., Associate Professor

Eugene Halton, Professor

Jennifer Jones, Assistant Professor

Mary Ellen Konieczny, Assistant Professor

Amy Langenkamp, Assistant Professor

Omar Lizardo, Associate Professor

Elizabeth McClintock, Assistant Professor

Erin McDonnell, Assistant Professor

Terence McDonnell, Assistant Professor

Rory M. McVeigh, Chair and Professor

Anne Mische, Associate Professor

Sarah Mustillo, Professor

Daniel J. Myers, Professor and Associate Provost for Faculty Affairs

Atalia Omer, Associate Professor

David Sikkink, Associate Professor

Christian Smith, Professor and Director of the Center for the Study of Religion and Society

Lynette Spillman, Professor

Jason Springs, Assistant Professor

Erika M. Summers-Effler, Associate Professor

J. Samuel Valenzuela, Professor

Andrew J. Weigert, Professor

Michael R. Welch, Professor

Richard Williams, Associate Professor

APPENDIX: GRADUATE SCHOOL POLICIES (FULL TEXT)

APPEAL PROCEDURE FOR GRADUATE STUDENTS

The purpose of this procedure is to afford graduate students at Notre Dame the opportunity to resolve complaints dealing with academic issues such as dismissal from graduate standing, placement on probationary status, denial of readmission to the same program (if the student was previously in good standing), and other program decisions that terminate or impede progress toward the degree.

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 the 'Grievance and Appeal Procedures' section of the Graduate School Bulletin of Information), or for disability-related grievances (see grievance procedure available through the Office of Disability Services).

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, the School of Architecture, or the ES-TEEM program.

Program Resolution Process

Conflicts should be resolved at the lowest level, i.e., within the student's program, according to grievance procedures specified in the program's graduate student guide. Programs are required to develop a formal grievance procedure approved by the Graduate School.

For complaints originating in the student's program, the student must first attempt resolution within the program by following the program's grievance procedure. If a mutually satisfactory resolution cannot be reached at the program level, the complaint may be brought to the Graduate School.

Formal Appeal Procedure to the Dean of the Graduate School

Complaints must be initiated by a written statement from the student to the associate dean of students in the Graduate School, indicating the nature of the problem, the date(s) the problem occurred, the grounds upon which the appeal is based, background information that the student considers important and the relief requested. The associate dean will request from the department chair (or chair of the program's appeal committee) a description of the results of the program's resolution process.

Grounds for formal appeal include procedural error, violation of official policy by academic or administrative personnel, or special mitigating circumstances beyond the student's control that were not properly taken into account in a decision affecting the student's academic progress.

The complaint must be sent to the Graduate School's associate dean of students within 30 calendar days of the department's resolution. The associate dean will then convene a meeting of an ad hoc academic appeals committee, composed of three faculty members chosen by the associate dean, all of whom will be current members of their respective College Council [two from the student's college and one from outside the student's college (if a student is enrolled in a trans-college program, each college will be represented on this committee)]. The committee will also include one non-voting graduate student. This student may either be one of the current Graduate Student Union representatives or a substitute from the appellant's college selected by the associate dean from a pool of students identified by the Graduate Student Union. The associate dean, who does not vote, will chair the committee. At the student's request or by request of the committee, this appeals committee will also meet with the student. The committee may also meet with other individuals involved.

APPENDIX

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 this recommendation, but in either case, he or she will issue a written decision to the appellant within 30 calendar days of receipt of the committee's recommendation. All deadlines may be extended in extenuating circumstances. The dean will send a copy of this decision letter to the department chair. 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 stu-

dents, 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:

- 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 occurs.¹ The choice of the semester is the student's.²
- 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

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

APPENDIX

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 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 available resources. Parental relief cannot be combined with other funding.

There are two important funding limits:

1. The total number of years of funding will not be extended
2. 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.³ 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

3. Those students for whom serving as a TA is a requirement must fulfill the requirement in a later semester.

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 Graduate 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.

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 comple-

APPENDIX

tion 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 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 candidate'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.

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