# DOCTORAL STUDIES PROGRAM



Few things have a greater impact than a good idea. That's why our Doctoral Studies Program encourages, challenges, and empowers you to ask big questions, think boldly, and chase the ideas that make the biggest impact. At Michigan Ross, you'll get the freedom and flexibility to pursue your passions through thought, collaboration, and research. You'll develop your teaching skills, refine your writing skills, and launch your academic career. So when it's time to step into a faculty position at one of the world's leading universities...

YOU'LL BE READY.

## WELCOME

It's my pleasure to welcome you to a top-ranked business school operating within one of the largest and very best research universities in the world.

As a PhD student at Michigan Ross, you will work side by side with faculty who are shaping their fields and the global business community with groundbreaking research. You will join a research enterprise where faculty address important questions using unique approaches. Sometimes that's economic or behavioral models. Sometimes the methodology blends the two, and sometimes it incorporates innovations from other fields. You're free to choose different paths while taking full advantage of the rich breadth and depth of intellectual inquiry found throughout the university.

The Doctoral Studies Program at Michigan Ross in particular prides itself on its diversity of scholars. Because we are a general management institution, our seven areas of study are equally strong. As a result, we have doctoral students from around the world exploring myriad topics. The international composition of students and range of scholarship in our midst mirrors the global business community of the 21st century and fosters creative problem solving.

Just as the multidisciplinary nature of Ross and of the University of Michigan are defining features of the institution, so too is the degree to which faculty and doctoral students work together and truly collaborate. Our faculty regard PhD students as "faculty in training" and, thus, colleagues. This leads to a supportive but also challenging and rewarding environment, both professionally and personally.

l invite you to apply to our Doctoral Studies Program and hope to welcome you as a colleague in the near future.

Best wishes,

R. Kopuscinski

**Roman Kapuscinski** Senior Associate Dean for Faculty and Research; John Psarouthakis Research Professor of Manufacturing Management; Professor of Technology and Operations

"We not only value the interaction between faculty and PhD students, but also fostering engagement across academic disciplines to better understand the most complex problems and tackle the big ideas."

## READY TO ASK BIG QUESTIONS

Questions are the wheel that moves the world forward. At Ross, we encourage students to challenge the status quo by asking big, tough, thought-provoking questions.

Why Do Banks Hide Losses? THOMAS FLANAGAN // PhD 24 How Can Leaders Be Effective and Maintain Their Well-Being? KATHERINE K. BAE // PhD '23 Examining of the Financial Independence Retire Early (FIRE) Movement. LAURA SONDAY // PHD '21 How Do Members of a Startup Deal with Losses Associated with Rapid Growth? HILARY HOYT HENDRICKS // PhD 24 Seeing the New



### "the moment when...

#### YOUR QUESTION MAKES AN IMPACT

Prashant Rajaram came to Michigan to follow his intellectual curiosity. He discovered a way to improve the user experience and the effectiveness of a streaming video platform by optimizing the sequence and duration of ads. Today he's an assistant professor of marketing at the University of Western Ontario's Ivey Business School.

#### PRASHANT RAJARAM // PhD '21

WINNER:

BEST PAPER AWARD AT THE 2019 HARING SYMPOSIUM

> "Finding the Sweet Spot: Ad Scheduling on Streaming Media"

## READY TO SUCCEED

Prepare to join the faculty at the world's top business schools. The Ross Doctoral Studies Program empowers you to shape the world of business by sharing your research, discoveries, and insights through writing, speaking, and teaching.

#### MAKE FIVE YEARS LAST A LIFETIME

A doctoral education is a once-in-a-lifetime investment that sets you up for a lifetime of learning. The intimate size of the Ross program is designed to foster in-depth research and develop teaching abilities in close partnership with the school's renowned faculty. A steady stream of coursework, assistantships, research, and other opportunities does make it challenging, but also incredibly rewarding.

#### YEAR1

- > Coursework and Preliminary Exam
- > Prepare for Teaching Observation
- > Research

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#### YEAR 2

- Coursework and Preliminary Exam
- > Prepare for Teaching: BA 830 Teaching Fundamentals

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- > Research and Second-Year Research Paper
- > Advance to Candidacy

#### YEAR 3

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 Research and Teach BBA Course
 Choose Dissertation Chair

# YEAR 5

- > Develop Market
- Paper and Job Talk
- > Enter Job Market
- > Accept Faculty Position
- > Defend Dissertation and Complete Degree

#### **TEACHER DEVELOPMENT**

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Because our graduates typically pursue academic careers at top-notch schools, we require our PhD students to teach an undergraduate course for one term. Our Teacher Development Program guides students by providing mentors and addressing instructional concerns through multiple avenues:

- Lectures, workshops, and brown-bag lunch discussions
- > A teaching methodology course
- > Class observations of master teachers
- Instructional presentations
- > Experience with the latest technologies

The diverse techniques our faculty employ from the case method to action-based learning to interactive video—provide a solid base for exploration.

You'll also develop the interpersonal skills and awareness needed to work as a valued colleague in an academic setting.

YEAR 4

**GREAT FACULTY AREN'T BORN.** 

It starts on day one. Even while you're in the program, you'll be seen as a future faculty member.

This distinctive feature of our PhD program

develops your expertise in four key areas:

THEY'RE MADE

> Research

> Teaching

> Service

Administration

> Defend Proposal

> Form Dissertation Committee

## READY TO GO ANYWHERE

Our Faculty in Training Program prepares you to break into the market, and our dedicated support teams help you land just about anywhere. We offer individualized guidance and support to navigate the defense process successfully.

### DARTMOUTH COLLEGE DUKE UNIVERSITY HARVARD UNIVERSITY HEC PARIS HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY LONDON BUSINESS SCHOOL MASSACHUSETTS INSTITUTE **OF TECHNOLOGY** NATIONAL UNIVERSITY OF SINGAPORE NEW YORK UNIVERSITY NORTHWESTERN UNIVERSITY STANFORD UNIVERSITY UNIVERSITY OF CALIFORNIA-LOSANGELES UNIVERSITY OF CHICAGO UNIVERSITY OF PENNSYLVANIA

BOCCONI UNIVERSITY





#### YOU PURSUE YOUR OWN PATH

I realized Michigan had the perfect blend of a caring, collaborative environment. Research matters here as a way to improve people's lives. It was also a place where I could make my own choices from the very beginning in terms of the research that I wanted to pursue.

> DEVIN KILPATRICK // PHD CANDIDATE

### YOU Should Know...

In the past five years, 100% of Ross PhD graduates secured research positions before graduation and 75% received tenure-track assistant professor positions.

## READY FOR THE NEXT LEVEL

Our small class sizes help us tailor the learning environment to empower students with the resources they need to succeed. One of the most valuable resources is exceptional access to our faculty. Starting on day one, our students collaborate with our world-class faculty as research assistants, co-authors, and in other capacities that move the research enterprise forward.

#### **ALWAYS LEARNING**

The Ross Doctoral Studies Program puts you in a position to step back from the day-to-day and examine why the business world works as it does. Our students collaborate with faculty on research projects and ask big, far-reaching questions that bridge the theoretical and practical. The atmosphere is intellectual and spirited. The doors are always open. The classroom is just the start.

#### **ALWAYS LEADING**

Michigan Ross is a leader in programmatic innovation and action-based learning in business education. The Aspen Institute recognizes Ross as one of the leading business schools in the world for integrating ethical, social, and environmental issues into its curriculum. In addition to worldclass academic departments in core business disciplines, Michigan Ross houses research institutes and centers that provide extraordinary thought leadership and learning opportunities:

- > Center for Positive Organizations
- > Erb Institute for Global Sustainable Enterprise
- » Mitsui Life Financial Research Center
- > Office of Tax Policy Research
- > Paton Center for Research in Accounting
- > Tauber Institute for Global Operations

#### PUBLIC UNIVERSITY IN THE U.S. - QS WORLD UNIVERSITY RANKINGS, 2019-2023

#### **ALWAYS LEVERAGING**

The University of Michigan is the top public research university in the United States, according to the National Science Foundation. It is highly regarded in many fields, including the social sciences, economics, psychology, sociology, and statistics. It also is home to the nation's preeminent academic social science laboratory, the Institute for Social Research; a superb college of engineering; and highly ranked schools of law and medicine. The Michigan Ross doctoral program leverages the university's resources by allowing students to pursue coursework in other disciplines.

#### **ALWAYS LISTENING**

We value diversity of background, experiences, and thought because we learn from our differences. As a recipient of the Rackham Faculty Allies Diversity Grant and Student Ally for Diversity Grant, our PhD program develops and builds upon diversity initiatives, which fosters a diverse, equitable, and inclusive environment.

## READY TO BE INSPIRED

No matter where you are at Ross, you're steps away from open, light-filled spaces that facilitate gatherings of all kinds. The Robertson Auditorium, Seigle Cafe, and the bright, spacious Davidson Winter Garden are just some of the inspiring spaces you'll find on campus.

#### **CUTTING-EDGE CLASSROOMS**

A variety of classroom sizes, configurations, and technological capabilities supports any learning style. Each of our classrooms has group study rooms nearby to foster the conversations, collaborations, and explorations essential to successful team-based learning.

#### **ADVANCED TECHNOLOGY**

Seamlessly integrated technology enables students and faculty to interact on campus and with project sponsors all over the globe. You'll also have access to our Research Computing office for computation, data management, computer programming, and statistical analysis. Students conduct studies in human behavior for various areas of study, like marketing, decision science, strategy, and leadership, in the Ross Behavior Lab.

#### **HEALTHY LIVING**

You'll have access to the Och Fitness Center, which features free weights as well as strength and aerobic machines. There are plenty of healthy eating options on campus with Seigle Cafe, the Executive Dining Room, Seven10 East Cafe, and a conveniently located Starbucks.

> THE THREE PRIMARY BUILDINGS AT MICHIGAN ROSS ARE CERTIFIED AS LEED SILVER AND GOLD.





### "the moment when...

#### YOU ARE SURROUNDED BY SUPPORT

I felt supported by my department in a very big way, whether that was talking through ideas or just being made to feel welcome. The faculty open their homes several times a year for events and get-togethers. I also felt very supported by the other students. We spent lots of time bouncing ideas off each other.

THEODORE DEWITT, // PHD '19, COMPUTATIONAL SOCIAL SCIENTIST. INTEROS

## READY FOR THE IDEAL SETTING

Gobluel



#### **#1 BEST PLACE TO LIVE IN AMERICA** - STUDYFINDS.COM 2023

As home to one of the greatest universities in the world, Ann Arbor is a city that is both intellectually robust and economically resilient. The University of Michigan attracts global leaders in all fields, including medicine, life sciences, law, engineering, public policy, and education. Rich with history and tradition, U-M and Ann Arbor offer a classic college town experience.

#### A CULTURAL HOT SPOT

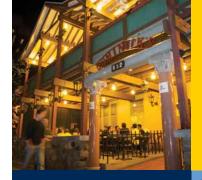
Ann Arbor enjoys an international reputation for its vibrant entertainment, music, and performing arts scene. In addition to bringing Yo-Yo Ma and the Berlin Philharmonic to town, the University Musical Society also hosts the only U.S. residency of England's Royal Shakespeare Company. The recently renovated University of Michigan Museum of Art features dramatic new galleries that highlight pieces drawn from the museum's more than 18,000 works.

#### A GOOD PLACE TO BE HUNGRY/THIRSTY

You can find whatever you want to eat (or cook) in Ann Arbor, no matter your taste or budget. Restaurants and specialty grocery stores abound, and there's no shortage of bars, breweries, and distilleries. A word to the wise: If you leave Ann Arbor without going to Zingerman's Delicatessen, you'll never know just how exciting a sandwich can be.

#### AN OUTDOOR OASIS

Imagine biking more than 60 miles of scenic trails, kayaking down the Huron River, exploring the Nichols Arboretum, or taking advantage of Ann Arbor's many golf courses. Michigan's beaches, sand dunes, lighthouses, and marinas are just some of the welcoming attractions found within a day's drive of the city. Local attractions such as the Ann Arbor Hands-On Museum, the petting zoo at Domino's Farms, and fall hayrides and cider mill tours will delight the whole family.



#2 CITIES WITH THE BEST PUBLIC SCHOOLS - NICHE 2023



**#1 MOST EDUCATED CITY** - WALLETHUB 2023





**#2 BEST COLLEGE TOWN** - WALLETHUB 2023





Michigan Ross is the birthplace of modern accounting research. Its Doctoral Studies Program builds on this tradition by developing the next generation of academic leaders who will produce work of lasting importance at the nation's top research-oriented universities. Placements in the last five years include the Boston College, University of Florida, University of Toronto, University of Washington, and University of Notre Dame.

A major strength of our program is its productive and highly regarded research faculty, who focus on issues of importance to the accounting and business communities. Our recent research topics include the impact of accounting information on capital markets and the behavior of decision-makers within firms.

The Ross PhD program in accounting also is well-known for its emphasis on close faculty – student interaction. We only admit two or three students into the program each year, which fosters joint research and ensures a highly collegial environment.

#### COURSES

Entering students are expected to have completed courses in introductory finance, advanced-level financial accounting, and intermediate managerial accounting in addition to the school's required background and analytical tools courses.

All doctoral students majoring in accounting also are required to complete the following minimum course requirements:

- Econometrics/statistics
  (3 courses)
- Economics (2 courses)
- > Finance (2 courses)
- > PhD seminars in accounting
- Electives (normally fulfilled in economics, finance, statistics, or operations management)

#### RESEARCH

The program requires two projects: a research proposal (at a minimum) completed in the first year, and a small-scale study completed in the second year.

#### PRELIMINARY EXAMINATION AND CANDIDACY

After completing coursework and the first research project, students may take the preliminary written exam. They advance to candidacy by passing the exam and completing the second research project. The remainder of the program is devoted to the dissertation.

#### GREGORY MILLER

Ernst & Young Professor of Accounting; Clyne Crawford Teaching Fellow; Faculty Director, Paton Accounting Center

"Collaboration" is a buzzword on many campuses. But as an alumnus and faculty member, Greg Miller knows it's a way of life at Ross. "What makes Michigan Ross special is how the faculty and students interact," he says. "PhD students are truly involved in the life of the department, providing great experiences and bringing energy to the faculty. That relationship is the heart of our PhD experience, and I believe it is unique among accounting programs." Miller calls his student experience "more than just a set of classes; it was an apprenticeship into being a scholar." Now, he is responsible for cultivating that experience for others. "What makes Ross students stand out is their passion for answering real questions in a way that adds value for researchers, students, and practitioners,"

he says. "The diversity of our people allows us to have rich discussions and investigations into many areas — providing true engagement without dogma." Miller spent 10 years on the faculty at Harvard before returning to Ann Arbor in 2008. His research focuses on financial communication — understanding how managers use financial information and the markets to communicate to outside stakeholders and opinion formers.

At Ross, you have the opportunity to learn from and work with some of the top scholars in the field. The faculty invest a significant amount of time and energy into mentoring PhD students, whether it's discussing new ideas, providing feedback on early work, or collaborating on joint research projects. They also encourage you to think carefully and creatively to tackle the big guestions that not only contribute to the academic literature. but also have meaningful practical implications. After spending five years in this intellectually challenging and collegial environment, you will be equipped with all of the skills that are needed to achieve a placement at a leading research university."

#### ANDREA DOWN // PhD '20

ASSISTANT PROFESSOR OF ACCOUNTING ROTMAN SCHOOL OF MANAGEMENT UNIVERSITY OF TORONTO The PhD in Business and Economics is a joint degree offered by Michigan Ross and the Department of Economics at the University of Michigan.

The goal of the joint program is to provide scholars with the best training in the theoretical and methodological approaches used in economics, combined with the specific training in business applications offered at Ross. The program is designed to serve students who have interests in broad microeconomic research areas relevant to business, including industrial organization, and business-related topics in labor, environmental, health, international, and development economics.

Graduates of this program are expected to be particularly attractive hires for academic positions in economics groups in business schools, as well as economics departments, policy schools, and schools of public health.

#### COURSES

Students devote the first two years of the program to meeting core and secondary requirements. Core requirements include:

- Microeconomic theory (four courses of 1.5 credits each, and a preliminary exam in the summer of the first year)
- Macroeconomic theory (two courses of 3 credits each, and a preliminary exam in the summer of the first year)
- Methods (math for economists and three econometrics courses of 3 credits each)
- Secondary requirements include:
- BE seminars (five courses of 1.5 credits each, with a B+-average grade requirement)
- A field of economics, such as industrial organization, international economics, or labor economics (two courses, plus a field exam in the summer of the second year)
- > Additional courses as necessary

#### RESEARCH

Students complete an empirical research project by the end of their third year.

#### PRELIMINARY EXAMINATION AND CANDIDACY

Students are expected to fulfill core and secondary requirements, including micro and macro preliminaries, and a field exam in one chosen field by the end of the summer of the second year to pass into candidacy. The remainder of the program is devoted to the dissertation.

#### **JAGADEESH SIVADASAN**

Buzz and Judy Newton Professor of Business Administration; Area Chair, Business Economics and Public Policy; Professor of Business Economics and Public Policy

Jagadeesh Sivadasan says the program provides a unique environment for students interested in businessrelated economic research. "The small program size and depth of support provided by Ross - combined with the coursework, faculty breadth, and placement support of the Economics Department — gives students a supportive setting for study and research," he says. Students in the program can follow a wide range of interests in economic fields where research has implications for business and related government policy. "Faculty in the business and economics group have varied interests encompassing industrial organization, health, international, environmental, and development economics," he says. Sivadasan's own research centers on how firm performance is impacted by a variety of government policies, such as labor, foreign entry, and trade regulation, as well as by firms' strategic choices. "In today's economy, firms are the key engines of innovation, propelling economic growth and improvements in social welfare across both developing and rich countries. I am fascinated by what makes firms in some countries more productive than others.

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The faculty at Ross are very supportive, and they really want you to do well. They enjoy listening to your ideas and helping you further your research. This supportive environment stretches across U-M. I've taken a lot of courses at the School of Public Health, and I've worked with faculty members there."

#### JORDAN RHODES //

PhD '20, DIRECTOR OF RESEARCH AND POLICY ANALYSIS, STATE OF MAINE Ross PhD students in finance have access to a large faculty whose research interests span the field's three main areas: corporate finance, asset pricing, and financial intermediation. Our faculty conduct research on a broad range of topics, such as the design of corporate financial policies, financial intermediation systems, measurement of default risk, the organization of mutual funds, market micro-structure, risk-return dynamics in the asset markets, and the role systematic irrationality plays in financial market behavior.

To complement its own courses, the finance program takes advantage of the University of Michigan's strengths in economics, engineering, and mathematics. Within Ross, two weekly finance seminars offer students exposure to the ideas of scholars from all over the world, and an informal setting in which to present their own research.

The Ross PhD program in finance emphasizes close interaction with faculty, both through research and teaching.

#### COURSES

Students complete most coursework during the first two years of the program. Because classes in micro-economic theory. mathematical economics, statistics, and finance are among the firstyear requirements, strong prior preparation is essential. Courses during the second year comprise at least six electives (typically in math. economics. and econometrics) in addition to two finance courses. Students take two more seminars in finance during the third year. For the remainder of the program, students typically take at least one course per term in an area related to their research.

#### RESEARCH

To become proficient in the art of research, students produce a research paper in the summer of each of the first two years under faculty guidance. They present their work in departmental seminars during the academic year. The Mitsui Life Financial Research Center awards \$2,000 for best performance in the first year of the program and \$3,000 for the best dissertation proposal in any given year.

### PRELIMINARY EXAMINATION AND CANDIDACY

Exams, covering finance and related areas, typically take place at the end of the second year. Students advance to candidacy by passing the exams and completing the two research papers. The remainder of the program is devoted to the dissertation.

#### UDAY RAJAN

David B. Hermelin Professor of Business Administration; Professor of Finance; Finance Faculty Doctoral Coordinator

Discussions among finance professors and students at Ross are always lively. And that's just the way Uday Rajan likes it. "A Ross PhD student never stops asking 'why,' We train each student to think through the cause-and-effect relationships behind real-world phenomena at an abstract level," he says. "The student then has the theoretical and empirical tools to provide insight into the causes of a phenomenon and prescribe improvements for the future." There is a close level of interaction between faculty and students at Ross, leading to several joint projects. "Our department spans all research areas in finance, be it asset pricing, corporate finance, financial intermediation, or market microstructure." he says. "We have an excellent group of active researchers, and interactions at seminars and workshops are very dynamic." Rajan currently is working on how fintech competition in payment services affects the banking system.

I cannot imagine a place where students can have better access to faculty or more opportunities to talk about research than at Ross. My experience was fantastic and the program was challenging from the first courses I took to my final dissertation defense. These challenges prepared me well for the job market. The prior placements of the program spoke for themselves, but as an incoming PhD student, it's difficult to have a sense of your potential. The fact that Ross had routinely placed students at top research schools sent a clear message that if I worked hard enough and wrote good enough papers, all schools would take me seriously on the job market."

TAYLOR BEGLEY // PhD '14 ASSISTANT PROFESSOR OF FINANCE, UNIVERSITY OF KENTUCKY GATTON COLLEGE OF BUSINESS AND ECONOMICS Understanding individual, group, and organizational dynamics is crucial to modern business. The management and organizations group brings an interdisciplinary approach to these issues through theoretical work, field and laboratory research, and archival studies. Research spans micro-social psychological dynamics in organizations to macro-sociological/organizational theory topics.

Doctoral students collaborate closely with our faculty and those involved in the school's Executive Education program. They also have at their disposal the university's extraordinary resources in social sciences. Several faculty hold joint appointments in social science fields at the university.

Interaction among scholars across social science disciplines is common. For example, the Interdisciplinary Committee on Organizational Studies brings together faculty and students from schools and departments across the university for weekly seminars. The Inter-university Consortium for Political and Social Research, based at U-M, offers summer methods institutes that our students frequently attend. Faculty strength in the burgeoning field of economic sociology has prompted the U-M Department of Sociology to organize a new area called economic sociology and organizations.

#### **COURSES**

The first two years of the program include a sequence of four seminars on organizational behavior and theory and four terms of research methods courses, two of which must be quantitative. Students take additional graduate courses in their areas of interest.

#### RESEARCH

Before the end of the second year, students complete a piece of empirical research under faculty guidance.

#### PRELIMINARY EXAMINATION AND CANDIDACY

The preliminary exam, covering organizational behavior, organizational theory, and research methods, takes place at the end of the second year. The remainder of the program is devoted to the dissertation.



Michael & Susan Jandernoa Professor of Management and Organizations

Sue Ashford works with PhD students often, involving them in ongoing research and new projects. "I'm highly driven to get things done and they're highly driven to learn new things and develop skills, so the collaborations tend to work extremely well," she says. Ashford's research centers on how proactive employees can make a positive difference in their careers and their organizations. Her work bucked the assumption that employees wait around for management action. For Ashford, there's no better place to pursue that kind of research than at Ross. "People here care about bottom-up change, care about individuals making a positive impact, care about prosocial behavior, and care about trying to address fundamental issues in our field in a way that changes the conversation." A PhD student at Ross is fully part of the Michigan family, she says. "We support our PhD students and interact with them as colleagues rather than as underlings," Ashford says. "We involve them in our research, celebrate their successes, and help them through trying times. Getting a PhD anywhere is a stretch experience. Here at Ross, you also receive the support you need to meet the challenges."



The M&O program allowed me to learn and try new things in a nurturing environment and then gave me the freedom to develop my ideas. The faculty are engaged and really care about students' success. Whenever I expressed an interest in doing something unique to further my development, they were fully supportive. Michigan Ross has all of the pieces I needed to grow as a scholar, and the resources and depth of collaboration across the university are unmatched."

LINDSEY CAMERON // PhD '20 ASSISTANT PROFESSOR OF MANAGEMENT, WHARTON SCHOOL AT THE UNIVERSITY OF PENNSYLVANIA As a field, marketing is concerned with developing an understanding of how consumers and producers interact in markets. As a department at Ross, marketing takes an interdisciplinary approach to developing this understanding, drawing from such disciplines as psychology, statistics, economics, and engineering to investigate important questions or applied problems.

Ross faculty and PhD students work collaboratively to publish cutting-edge research on topics such as consumer decision-making, sensory marketing, decision and cultural neuroscience, marketing resource allocation, brand portfolio management, new product development, advertising response models, and social media in leading academic journals in marketing and related disciplines.

At Ross, we prepare our students to become research scholars at top research universities who further the field of marketing in both research and practice.

#### COURSES

Students are expected to take a sequence of rigorous courses over the first two years as a prelude to conducting original dissertation research. These cover methodological foundations (e.g., econometrics and multivariate statistics), theoretical foundations (e.g., microeconomics and social psychology), and advanced marketing-specific seminars. The course sequence includes required courses and electives that speak to students' own interests. We encourage students to achieve master'sdegree competency and certification in one of the basic cognates to marketing, such as psychology, economics, or statistics.

#### RESEARCH

Aside from working directly with faculty from the outset, students complete a large-scale research paper by the end of their second year of the program, modeled on articles in leading academic marketing journals.

### PRELIMINARY EXAMINATION AND CANDIDACY

A preliminary exam, which covers marketing-specific and other methodological topics, is given at the end of the second year of the program. Students are allowed ample preparation time, including meetings with individual faculty sharing their interests.

#### ARADHNA KRISHNA Dwight F. Benton Professor of Marketing

Aradhna Krishna's research underscores the boundary-less culture of Michigan Ross. She is a pioneer in the field of sensory marketing, exploring how subconscious triggers affect how people make purchasing and consumption decisions. She explores the way a product's look, feel, taste, sound, and smell contribute to how it's perceived and how people respond to it. This requires working with colleagues in other disciplines, such as psychology and it is highly encouraged at Ross. "This is an interdisciplinary field and the University of Michigan allows for a very interdisciplinary focus," Krishna says. In addition to sensory marketing, she also designs winning cause marketing and social responsibility programs, and creates engaging pricing and promotion policies. She says PhDs will find a rigorous academic program in a collegial environment. "We are very serious academics and we really care about our students," Krishna says.

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What attracted me to Ross initially was that the marketing department studied a wide range of topics — from advertising to brain imaging. Chances are you'll diversify or change your interests through a five-year program, and such a place allows you to explore different topics, guided by field experts, to find what is right for you. Aside from the renowned faculty, the program stood out in terms of the diversity of students. My colleagues came from all over the world and with various backgrounds. Insights from other disciplines like engineering or psychology inform the research that students conduct at Ross."

LINDA HAGEN // PhD'16 ASSISTANT PROFESSOR, DEPARTMENT OF MARKETING, UNIVERSITY OF ILLINOIS CHICAGO As the dominant social and economic organization of our time, the business corporation wields enormous power. The Ross PhD program in strategy prepares students for research and careers that address issues of corporate character, actions, and success. Drawing from behavioral sciences, the program examines the firm's internal organization, its relationship with external environments, its strategic decision-making processes, and its overall performance. Strategy research at Michigan Ross focuses on assessing fundamental, underlying differences among seemingly similar organizations.

Many business schools house strategy programs within a larger management department. At Ross, the program reflects the specific research interests of our faculty. At the same time, the program is highly interdisciplinary. Our students and faculty interact with students in other disciplines, including economics, sociology, psychology, and political science, through coursework, research projects, colloquia, and dissertation committees. Our students and faculty also are tied to other programs across the university. We encourage students to conduct research with a broad spectrum of faculty, and we require them to choose a cognate field.

#### COURSES

Students generally take two years, or four to five semesters, to complete the 16 to 20 course requirements. Courses, some of which are taken outside Michigan Ross, include:

- Economics and organizational theory (five-six courses)
- Methods (five-six courses)
- Strategy applications
  (6 doctoral seminars, plus seminars in related areas)
- Cognate applications (often business economics, management and organizations, psychology, or sociology)

#### RESEARCH

By Jan. 1 of the third year in the program, students must complete a research paper. It may use existing data but also must demonstrate the student's capacity for original research.

#### PRELIMINARY EXAMINATION AND CANDIDACY

Written qualifying exams have two components: an area exam and a research methods exam. Both exams usually are taken during the summer after the second year of the program, after completion of all doctoral coursework. Successful completion of all courses and the comprehensive exams qualifies a student for candidacy. The remainder of the program is devoted to the dissertation. Strategy dissertations tend to have both theoretical and empirical components. Students generally develop a model of a phenomenon or problem and then collect data to test their theoretical predictions and generate implications of their study.



Associate Professor of Strategy; Strategy Faculty Doctoral Coordinator

"The distinct quality of the Michigan Ross PhD program is reflected in its faculty's relentless effort in cutting-edge research, its vibrant and collegial intellectual community, and close collaboration between faculty and doctoral students," says Maggie Zhou. Faculty members spend a great amount of time mentoring, training, and advising students. Students are strongly encouraged to research across disciplinary boundaries. "We are one of the top programs in the country that embrace an interdisciplinary approach to strategy research," she says. "We apply high standards of research rigor to all topic areas, and we seek to develop the next generation of thought leaders in solving fundamental and emerging problems in the strategy field." Zhou's own research examines the role of complexity in setting limits to firm growth, corporate and competitive strategies, and organization design. "I believe managing complex internal activities and institutional environments is essential for firm growth and economic development in a global economy."

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At Ross, I was not only equipped with the methodological skills needed to carry out high-quality research, but was also encouraged to pursue big questions in my field. The easy access to top-tier faculty members in other disciplines, including economics, sociology, political science, complex systems, etc. helped add to the depth and breadth of my thinking. Additionally, I benefited greatly from the efficient teaching training at Ross, which allowed me to accomplish my teaching responsibilities and still focus on research as I transitioned into my faculty position."

CHALI // PhD '21 ASSISTANT PROFESSOR IN MANAGEMENT, MCCOMBS SCHOOL OF BUSINESS, UNIVERSITY OF TEXAS AT AUSTIN Technology and operations is central to a wide range of global management challenges facing business today. Increasing globalization has placed supply chain management at the core of the world economy, and the rapid evolution of technology, from e-commerce to social media, is presenting enormous information technology and operations management challenges. Sustainability concerns have raised operational efficiency as an urgent management concern.

At Ross, we study these important issues by using the overlapping heritages of operations management, organizational information technology, operations research, management science, and statistics. Students master rigorous, model-based, empirical, and experimental research methods and apply these to current research problems. Our students and faculty have explored innovations in healthcare services; technology-enabled business ecosystem innovation; sustainability in supply chains; global healthcare delivery; supply chain risk management; renewable energy management; and revenue management for sports events.

#### COURSES

First-year courses focus on fundamental mathematical modeling and analysis tools, including dynamic programming, stochastic processes, game theory, and inventory theory. Courses in the second year allow students to apply these tools to technology and operations topics, develop areas of specialization, and round out their business education.

#### RESEARCH

Students complete research papers at the end of each of the first two years of the program.

#### PRELIMINARY EXAMINATION AND CANDIDACY

Students must complete two preliminary exams, one at the end of each of the two years of coursework. The remainder of the program is devoted to the dissertation.

#### IZAK DUENYAS

Herrick Professor of Business; Professor of Technology and Operations; Professor of Industrial and Operations Engineering; Faculty Director, Executive MBA Program

"Ross PhD students are among the brightest in the nation," says Duenyas. "The program is extremely competitive, and we only admit students who have excellent technical training but also a natural interest in solving business problems and using analytical and empirical models to discover interesting new insights about business issues." Duenyas' own research interest is supply chain management. His most recent focus is on how companies manage supply chain issues under information asymmetry. That applies to inventory management in the supply chain, sourcing, production, and outsourcing. Duenyas believes good academic research is driven by close collaboration with industry. "What sets the Ross PhD program in technology and operations apart from other programs is the problem-driven focus of the faculty and students," he says. "We work with companies continuously. Instead of dreaming up problems in our offices, we are interested in finding out the important problems that keep high-level executives awake at night.



The Technology and **Operations department** at Michigan Ross conducts research on a wide range of topics using diverse methodologies. Students are offered great resources to discover their own passions and pursue high-guality research. The faculty are world-class, working on cutting-edge research and creating real-world impact. They guide students to explore enriching research areas and prepare them to pursue productive academic careers at leading business schools."

#### ZHAOHUI (ZOEY) JIANG //

PhD '20 ASSISTANT PROFESSOR OF BUSINESS TECHNOLOGIES, TEPPER SCHOOL OF BUSINESS, CARNEGIE MELLON UNIVERSITY

## **READY TO DIG IN**

You won't find them on the list, but passion and determination are definitely unwritten requirements in our book.

### DEGREE REQUIREMENTS

#### COURSEWORK

The first two years of the Michigan Ross Doctoral Studies Program usually are devoted to courses that satisfy university, school, and area requirements.

#### UNIVERSITY REQUIREMENTS > COGNATE COURSES

Two graduate-level courses in university departments or colleges outside Ross. This requirement is designed to increase students' intellectual breadth. Students commonly elect cognate courses in economics, psychology, sociology, statistics, or engineering.

#### MICHIGAN ROSS REQUIREMENTS > GENERAL BACKGROUND COURSES

Basic knowledge in accounting, finance, marketing, and organizational behavior. Students entering with an MBA usually will have satisfied this requirement. Others fulfill it through doctoral, MBA, or executive education courses.

Typically, students take a one-year, graduate-level sequence in statistical methods and probability through the university's statistics or economics departments. Individual areas determine the appropriate sequence and additional courses to prepare students for research in their fields.

#### AREA REQUIREMENTS > DOCTORAL SEMINARS

These sequences acquaint students with research literature and current themes and controversies in the field. Area seminars are supplemented by schoolwide doctoral seminars in research methods and research on decision-making under uncertainty.

#### RESEARCH

Although coursework is important, the main goal of the doctoral program is to impart independent research skills. We achieve this under a mentorship model.

#### **RESEARCH ASSISTANTSHIPS**

Students work with faculty formally and informally as research assistants, beginning in the first semester.

#### **RESEARCH REQUIREMENTS**

Students must satisfy research requirements specified for their area.

#### TEACHER DEVELOPMENT

The Teacher Development Program provides students the support and resources necessary to enable them to teach at the high level expected at Ross and other elite schools. This program requires students to teach at least one undergraduate course in their specialty, often during the third year of doctoral study. Specific goals of the program include enabling doctoral students to:

- > Develop mastery of key instructional methods
- > Acquire a broad range of teaching strategies that facilitate learning
- Create student-oriented instructional environments that are conducive to learning
- > Identify criteria by which to monitor teaching effectiveness

#### PRELIMINARY EXAMINATIONS

Preliminary examinations are a prerequisite for candidacy and typically take place during the second year of study. They are designed and administered by each area to evaluate a student's mastery of basic knowledge.

#### **DOCTORAL DISSERTATION**

When students have fulfilled the above requirements, they are eligible to prepare a doctoral dissertation an original and significant piece of research that is conducted and written under the guidance of a faculty committee. The average time from dissertation proposal to oral defense of the completed project is two years.

### YOU SHOULD KNOW...

PhD students dedicate an average of 45 teaching hours throughout the program.

## READY TO GET GOING

#### **ADMISSION CRITERIA**

We rank creativity, the capacity for independent thinking (demonstrated through work or research), and excellent academic skills high on our list of qualifications. We also consider fit with faculty research interests and contribution to the diversity of the student community. All students must possess a bachelor's degree from an accredited college or university and, through previous courses or other means, demonstrate working knowledge of college-level algebra, calculus, and intermediate microeconomics. Accounting and marketing students also must demonstrate proficiency in linear algebra and advanced calculus. An MBA or master's degree in an allied field may be helpful, but it is not required and will not shorten the time in the program. We especially invite applications from qualified students with nontraditional backgrounds, international students, women, and members of underrepresented racial and ethnic groups.

#### **FINANCIAL AID**

Michigan Ross provides merit-based financial aid to all students admitted to our doctoral program. We provide five years of funding, which includes a full tuition waiver, health insurance for the student and dependents, and a generous stipend package that combines fellowship funding and a graduate assistantship.

Michigan Ross provides funding for year-round research assistantships, which typically require 10 to 12 hours of work per week. Research assistantships are not just a source of financial assistance, they are the centerpiece of the program's mentorship philosophy. In addition to research, all students spend at least one term as a graduate student instructor, typically during their third year. We encourage students to apply for additional external sources of support when available.

#### **APPLYING TO THE PROGRAM**

Michigan Ross and the Horace H. Rackham School of Graduate Studies at the University of Michigan jointly administer the applications for the PhD programs in business administration and in business and economics through an online submission process. As part of the application, individuals must designate a single area of study from the seven areas offered by Michigan Ross. You will find detailed information regarding the application process, our faculty and their research, and our seven academic areas at **michiganross.umich.edu/phd**.

YOU SHOULD KNOW...

We give full funding to all students admitted to the program

### UNDERGRADUATE AND MASTER'S DEGREES

Accounting

Actuarial Sciences Advertising AfroAmerican & African Studies Agricultural Economics Applied Economics Applied Mathematics Applied Mechanics Bioengineering Business Administration Business & Management Business Economics **Business Statistics** Civil & Environmental Engineering Cognitive Psychology Cognitive Science Computer Sciences Econometrics Economics Education Electrical Engineering Electronics Engineering Finance Financial Engineering Higher Education

Hotel, Motel & Restaurant Management Industrial & Operations Engineering Industrial Engineering Information Sciences Instrumentation Technology Interdisciplinary Programs International Business Management International Relations law Management Science Marketing Math of Finance & Risk Management Mathematics Neurosciences **Operations Management** Org Behavior & HR Management Political Science & Government **Probability & Statistics** Psychology Sociology Statistics Transportation Engineering

### ROSS DOCTORAL COMMUNITY

Students	89
Age range	21-41
(at time of enrollment)	
International students	58%
Women	56%
Advanced degrees	62%

#### 2024 CLASS PROFILE

Class size	15
Age range	. 24-30
(at time of enrollment)	
International students	73%
Women	47%
Advanced degrees	73%

### **LET'S CONNECT**

Reach out to our office to introduce yourself and learn more about the Ross Doctoral Studies Program. We can connect you with a current PhD student or a faculty member to get more insight into what it's like to be in the program. **rossphdprogram@umich.edu 734-764-2343** 

### michiganross.umich.edu/phd

### MICHIGAN ROSS

Stephen M. Ross School of Business University of Michigan 701 Tappan St. Ann Arbor, MI 48109-1234 +734-764-2343 | RossPHDprogram@umich.edu

#### The Regents of the University of Michigan

Jordan B. Acker, Michael J. Behm, Mark J. Bernstein, Paul W. Brown, Sarah Hubbard, Denise Ilitch, Ron Weiser, Katherine E. White, Santa J. Ono *(ex officio)* 

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