BUSINESS, DOCTOR OF PHILOSOPHY (PH.D.) WITH A CONCENTRATION IN INFORMATION SYSTEMS

Program accreditation
Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Program goal
The Ph.D. in Business program is designed specifically for individuals intending to fill positions at institutions that require a balance of scholarly training, teaching and practical application of the appropriate field of study. With its small size, the program allows for extensive one-to-one interaction between students and faculty. Three concentrations are offered: accounting, information systems and management.

A basic tenet of the Ph.D. in Business program is that the classic trilogy of research, teaching and service typically invoked in university mission statements is synergistic. The program strives to develop graduates who share this perspective and aspire to well-rounded individual roles within universities, colleges and other learning organizations. For this reason, the program provides instruction in both research and teaching.

Instruction in basic and applied research is the cornerstone of the program. To fulfill the requirements for the degree, students must demonstrate successful completion of prerequisite and advanced courses, comprehensive examinations, and completion and defense of a dissertation. The advanced courses provide coverage in basic theories, methodologies and techniques needed to conduct research. The dissertation demonstrates the student’s competence in conducting independent research.

Enhancement of teaching skills is emphasized in the program. It provides students with mentoring and teaching experience. Formal instruction designed to augment student teaching skills is also required. Mentoring involves teaming a student with a faculty member with the goal of augmenting student self-awareness and self-confidence in the classroom. Classroom experience is required to insure that the Ph.D. graduate enters the job market with certifiable teaching experience. The formal courses are designed to provide substantive instruction on teaching the adult learner.

A third aspect of the Ph.D. program is its emphasis on practical application in the area of study for students concentrating in information systems. In information systems, students usually work on projects brought in to the Information Systems Research Institute. These projects focus on user applications and emphasize solutions to specific requirements.

Student learning outcomes
1. Students will demonstrate the ability to apply general principles of scientific research and methodologies to critically review published research papers.
2. Students will demonstrate the ability to
   a. Design a research study
   b. Select the appropriate methodology
c. Develop the study into a research proposal
3. Students will demonstrate the ability to identify ethical dilemmas in the major area of study and know how to respond ethically to such issues.
4. Students will demonstrate an understanding of current knowledge in the major area of study.
5. Students will demonstrate the ability to effectively communicate and teach knowledge in the major area of study.
6. Students will demonstrate the ability to develop and conduct research in the major area of study (i.e., complete an independent doctoral-level research project pertaining to the state of the art of the student’s major area).

VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs
The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (http://www.graduate.vcu.edu) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students. (http://bulletin.vcu.edu/academic-reggs)

Degree candidacy requirements
A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master’s or doctoral status according to the degree candidacy requirements of the student’s graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student’s faculty regarding the student’s academic achievements and the student’s readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements. (http://bulletin.vcu.edu/academic-reggs/grad/candidacy)

Graduation requirements
As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.
Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements. (http://bulletin.vcu.edu/academic-regs/grad/graduation-info)

Other information
School of Business policies and procedures for graduate master’s degree students are available on the school's website at business.vcu.edu/graduate-studies/current-graduate-students (http://business.vcu.edu/graduate-studies/current-graduate-students).

Apply online at graduate.admissions.vcu.edu (http://www.graduate.admissions.vcu.edu).

Admission requirements

<table>
<thead>
<tr>
<th>Degree:</th>
<th>Semester(s) of entry:</th>
<th>Deadline dates:</th>
<th>Test requirements:</th>
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<tbody>
<tr>
<td>Ph.D.</td>
<td>Fall</td>
<td>Jan 1</td>
<td>GMAT or GRE</td>
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In addition to the general admission requirements of the VCU Graduate School (http://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements), applicants to the doctoral program in business must submit an up-to-date resume.

Degree requirements
Students should at a minimum possess knowledge equivalent to the core courses in the Master of Science in Information Systems program: INFO 610, INFO 620, INFO 630 and INFO 640. Students who do not have knowledge equivalent to these courses, as assessed by the IS department Ph.D. committee, must take one or more of the courses in which they lack knowledge upon admission into the Ph.D. program.

In addition to the VCU Graduate School graduation requirements (http://bulletin.vcu.edu/academic-regs/grad/graduation-info), Ph.D. in Business students must complete a minimum of 53 graduate credit hours, including research core, major content core, elective course work and a minimum of 12 credit hours of dissertation research. Each student must also take GRAD 602, complete a teaching portfolio and take a written comprehensive examination in the concentration area.

Curriculum requirements

**Research core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUSN 700</td>
<td>Principles of Scientific Inquiry in Business</td>
<td>3</td>
</tr>
<tr>
<td>INFO 701</td>
<td>Qualitative Research in Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 702</td>
<td>Design Science Research and Methods in Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 643</td>
<td>Applied Multivariate Methods (or equivalent course)</td>
<td>3</td>
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<tr>
<td>A course in quantitative research and methods</td>
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<td>3</td>
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**Concentration courses**

Complete four of the following IS doctoral seminars:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>INFO 710</td>
<td>Database Systems</td>
</tr>
<tr>
<td>INFO 720</td>
<td>Analysis and Design of Systems</td>
</tr>
<tr>
<td>INFO 730</td>
<td>Information Systems Strategy</td>
</tr>
<tr>
<td>INFO 740</td>
<td>Decision Support and Intelligent Systems</td>
</tr>
<tr>
<td>INFO 750</td>
<td>Information Systems Security</td>
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<tr>
<td>INFO 760</td>
<td>Knowledge Management</td>
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<tr>
<td>INFO 790</td>
<td>Doctoral Seminar</td>
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</table>

**Required course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GRAD 602</td>
<td>Teaching and Learning in Higher Education</td>
<td>2</td>
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</tbody>
</table>

**Electives**

Choose four additional courses, of which up to three may be 600-level courses taught by doctoral (or equivalent) faculty, where the selection of such courses is approved by the department's Ph.D. committee or the department Ph.D. adviser. All four may be guided studies, but no more than two guided studies may be supervised by the same faculty member.

**Dissertation research**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INFO 898</td>
<td>Dissertation Research in Information Systems (minimum of 12 credit hours)</td>
<td>12</td>
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</table>

Total graduate credit hours required (minimum) 53

Graduate program director
Jayaraman Vijayakumar, Ph.D.
Associate dean, graduate programs
Email: jvijayak@vcu.edu
Phone: (804) 828-4622

Additional contact
Victoria Y. Yoon, Ph.D.
Information systems coordinator
Email: vyyoon@vcu.edu
Phone: (804) 828-0672

Program website: business.vcu.edu/graduate-studies/phd-in-business (http://business.vcu.edu/graduate-studies/phd-in-business)