INFORMATION SYSTEMS, CERTIFICATE IN (POST-BACCALAUREATE UNDERGRADUATE CERTIFICATE)

The Certificate in Information Systems is designed for students who hold bachelor's degrees in fields other than information systems and who wish to continue their education in information systems but are not pursuing a graduate degree at this time. Candidates for the certificate are required to complete a total of 30 hours beyond the bachelor's degree, including the courses listed below or their equivalents, with a minimum of 24 credit hours of study in information systems to be taken while in the undergraduate certificate program at VCU.

The certificate is designed to provide more than a basic knowledge of information systems. Specifically, persons completing the program are expected to achieve competency in understanding information systems terminology, concepts and principles; computer program design, writing and testing; systems analysis/design through proper application and knowledge of current hardware and software; and planning and carrying out system development and the management of information systems. Students acquiring these skills are well-received in the business community and in governmental organizations.

For additional information, please visit the School of Business website at business.vcu.edu/undergraduate-studies/prospective-certificate-students/undergraduate-certificates/post-baccalaureate-certificate-in-information-systems (http://business.vcu.edu/undergraduate-studies/prospective-certificate-students/undergraduate-certificates/post-baccalaureate-certificate-in-information-systems).

Learning outcomes

Upon completing this program, students will know and know how to do the following:

- Apply knowledge of computing and mathematics appropriate to the discipline
- Analyze a problem, and identify and define the computing requirements appropriate to its solution
- Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- Function effectively on teams to accomplish a common goal
- Understand professional, ethical, legal, security and social issues and responsibilities
- Communicate effectively with a range of audiences
- Analyze the local and global impact of computing on individuals, organizations and society
- Recognize the need for and be able to engage in continuing professional development
- Use current techniques, skills and tools necessary for computing practice
- Understand the processes that support the delivery and management of information systems within a specific application environment

Special requirements

Students cannot be accepted into the program until they have completed all the requirements for their bachelor's degree and have achieved a minimum 2.5 GPA in their undergraduate work.

After acceptance in the program, certificate candidates are required to complete a minimum of 24 credit hours of their program at VCU.

Academic regulations for School of Business post-baccalaureate undergraduate certificates

The School of Business has specific academic regulations (http://bulletin.vcu.edu/undergraduate/business/undergraduate-information/post-baccalaureate-certificates) that apply to students in the undergraduate certificate program.

INFO 160 is a prerequisite for INFO 202. INFO 202 is a prerequisite for INFO 350, INFO 364 and INFO 370. MATH 211 is a prerequisite for INFO 350, INFO 364 and INFO 370. INFO 202 and MATH 211 cannot be used as electives within the information systems post-baccalaureate program. Exceptions to prerequisite courses require recommendation of the adviser and permission of the department chair.

Degree requirements for Information Systems, Certificate in (Post-baccalaureate undergraduate certificate)

Required courses (24-credit minimum) 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 323</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>INFO 300</td>
<td>Information Technology Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>INFO 350</td>
<td>Programming</td>
<td>3</td>
</tr>
<tr>
<td>INFO 361</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364</td>
<td>Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 370</td>
<td>Fundamentals of Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>INFO 461</td>
<td>Information Systems Planning and Project Management</td>
<td>3</td>
</tr>
<tr>
<td>INFO 465</td>
<td>Projects in Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Approved upper-level electives 6

Total minimum requirement 30 credits

1 Students who receive waivers for any required courses must complete additional approved upper-level information system electives to total 30 credits.

Sample outline

(Most students are enrolled part time. Students planning full-time enrollment should consult with the program adviser.)

Year one

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall semester</td>
<td>INFO 300</td>
<td>Information Technology Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>INFO 361</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Term Hours:</td>
<td>6</td>
</tr>
<tr>
<td>Spring semester</td>
<td>INFO 350</td>
<td>Programming</td>
<td>3</td>
</tr>
</tbody>
</table>
INFO 364 Database Systems 3

Term Hours: 6

Year two

Fall semester

BUSN 323 Legal Environment of Business 3
INFO 370 Fundamentals of Data Communications 3

Term Hours: 6

Spring semester

INFO 461 Information Systems Planning and Project Management 3

Approved upper-level elective 3

Term Hours: 6

Year three

Fall semester

INFO 465 Projects in Information Systems 3

Approved upper-level elective 3

Term Hours: 6

Total Hours: 30