

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 (<https://business.vcu.edu/academics/information-systems/post-baccalaureate-certificate-in-information-systems/>).

Learning outcomes

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

- Apply computer hardware and software knowledge in support of organizational systems
- Apply the appropriate programming language skills to solve the computing requirements appropriate to its solution
- Analyze, design, implement and evaluate a computer-based system, process component or program to meet the desired needs of an organization
- Understand the fundamentals of data management and analyze and build databases to meet organizational needs
- Identify the basic components, functions and types of telecommunications networks (hardware, software, media and services) used in organizations, as well as identify major developments in these technologies and the appropriate applications of them
- Identify the characteristics that affect the choice of IT applications, IT platforms, data access policies and systems-development methods that impact the performance of IS systems in organizations
- Understand basic principles of good project management

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 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

Course	Title	Hours
BUSN 323	Legal Environment of Business	3
INFO 300	Information Technology Infrastructure	3
INFO 350	Programming	3
INFO 361	Systems Analysis and Design	3
INFO 364	Database Systems	3
INFO 370	Fundamentals of Data Communications	3
INFO 461	Information Systems Planning and Project Management	3
INFO 465	Projects in Information Systems	3

Electives

Course	Title	Hours
	Approved upper-level electives	6

The minimum total of credit hours required for this certificate is 30.

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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

Fall semester		Hours
INFO 300	Information Technology Infrastructure	3
INFO 361	Systems Analysis and Design	3
	Term Hours:	6

Spring semester

INFO 350	Programming	3
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

The minimum total of credit hours required for this certificate is 30.