

JUNIOR YEAR

First Semester

Course No.	Course Title	Credits
*CH 3122	Radioisotope Techniques or	
MP 3124	Physics IIIc	3
CH 3130	Analytical Chemistry	4
CH 3125	Physical Chemistry I	3
CH 3125L	Physical Chemistry I Lab	1
	Social Science Area	3
Total	.....	15

Second Semester

CH 2203	Biochemistry	3
CH 2203L	Biochemistry Lab.....	1
CH 3223	Instrumental Analysis.....	4
CH 3224	Physical Chemistry II	3
CH 3224L	Physical Chemistry II Lab	1
*MP 3231	Statistics for Science or	
CH 3220	Advanced Organic Chemistry	3
Total	.....	15

* Students may substitute courses of equal credits in the sciences, computers, mathematics, or Business Administration with permission of Advisor and Department Chairperson.

SENIOR YEAR

First Semester

Course No.	Course Title	Credits
CH 4117	Organic Analysis	4
CH 4126	Advanced Inorganic Chemistry	3
*CH 3122	Radioisotope Techniques or	
MP 3124	Physics IIIc	3
LA 4037	Non-Western Societies	3
	Elective.....	3
Total	.....	16

Second Semester

CH 3157	Advanced Inorganic Lab.....	2
CH 3220	Advanced Organic Chemistry or	
*MP 3231	Statistics for Science.....	3
CH 4241	Advanced Physical Chemistry	3
LA 1060	Introduction to the Arts	3
	Elective.....	2
Total	.....	16

Social Sciences Area: select one of the following:

LA 2012	Introduction to Sociology.....	3
LA 2036	Introduction to Psychology	3
LA 4203	Social Psychology and Human Interaction	3

Humanities Area: select two courses from the following:

LA 2040	Modern History of Western Societies ...	3
LA 2042	Introduction to Philosophy	3
LA 2138	History of Western Civilization I.....	3
LA 3032	American History and Government since 1877.....	3
LA 4127	United States Foreign Policy	3

Biotechnology and Biochemistry Minors

(for Chemistry Majors)

Students majoring in Chemistry may enroll in an interdisciplinary minor including the following recommended courses. Substitutions may be arranged in advance with permission of the Department Chairperson. Check course description for prerequisite requirements.

Biochemistry Minor

Course No.	Course Title	Credits
BY 2003	Genetics	3
BY 3002	General Microbiology	4
BY 4155	Molecular Biology.....	4
CH 4205	Advanced Biochemistry.....	4
Total	.....	15

Biotechnology Minor

Course No.	Course Title	Credits
BY 2003	Genetics	3
BT 3000	Introduction to Biotechnology.....	3
BY 3002	General Microbiology	4
FS 3122	Food Engineering I.....	3
FS 4004	Industrial Fermentations	3
Total	.....	16

**COMPUTER AND BUSINESS
INFORMATION SYSTEMS**

Faculty:

Guoqi (George) Lu, Chairperson
Kenneth Lee
Veronica McGowan
Andrew Levin

The Computer and Business Information Systems (CBIS) program at Delaware Valley College provides practical skills and a strong theoretical background foundation in areas of computer and business information systems. The program emphasizes the integration of broad business and real-world perspectives, strong analytical and critical thinking skills, interpersonal communication and teamwork skills, and up-to-

Programs

date information technology solutions. These characteristics form the bridge between an organization and its technology; our students will have the capability to contribute a great deal to their future employers.

The CBIS curriculum consists of three major academic components (IT courses, business courses, and core curriculum courses) as well as an employment program. Required IT courses focus on the fundamental knowledge and skills in many IT areas such as Web technology, database, information systems, and data communications and network. Required business courses give students critical knowledge and skills they need in today's business world. The third component of the CBIS curriculum addresses the College's core curriculum requirements, a set of carefully constructed subjects which enforce student's basic skills, e.g. Math and English, enhance their critical thinking and communication skills, and expand their horizons in the areas of arts, sciences, humanities, and social sciences.

There is a student chapter of the Association of Information Technology Professionals (AITP) at Delaware Valley College. This national organization enhances our program by providing opportunities for our students to meet and interact with professionals and employers in IT related fields, to visit various companies such as Unisys and Verizon, and to enjoy guest lectures.

Currently, the CBIS Alumni are employed as computer programmers, information systems analysts, database administrators, computer systems engineers, network administrators, project managers, web technology specialists, network security specialists, as well as business managers.

In summary, the Bachelor of Science Degree in Computer and Business Information Systems requires 124 credit-hours of course work and 4 credit-hours for the successful completion of an employment program, which involves 500 hours working in IT related fields.

Minor in Computer and Business Information Systems

Students must meet with the CBIS Chairperson in advance to create a minor in CBIS that will best benefit the individual student. Required courses for this minor are:

IT 1031 Intermediate Computer Applications (3 credits) plus any other five IT courses (15 credits) approved in advance by the CBIS chairperson

Any courses required in the student's major cannot be used in this minor.

RECOMMENDED COURSE SEQUENCE

FRESHMAN YEAR

First Semester

Course No.	Course Title	Credits
BY 1115	Natural Science I.....	3
EN 1101	English I	3
IT 1031	Intermediate Computer Applications....	3
LA 1020	Skills for College Success	1
	Humanities Area.....	3
MP 1203	Elementary Functions	3
Total	.....	16

Second Semester

BY 1216	Natural Science II.....	3
EN 1201	English II	3
IT 3117	Data Structures & File Organization....	3
MP 4132	Symbolic Logic	4
	Restricted Elective in BA.....	3
Total	.....	16

SOPHOMORE YEAR

First Semester

Course No.	Course Title	Credits
BA 1005	Introduction to Business	3
BA 2008	Macroeconomics	3
BA 2123	Principles of Accounting I.....	3
IT 2216	Introductory Programming	3
MP 2114	Business Statistics I	3
PE 1109	Physical Education I	1
Total	.....	16

Second Semester

BA 2224	Principles of Accounting II.....	3
IT 3203	Hardware and Software.....	3
LA 2005	Speech.....	3
PE 1209	Physical Education II	1
	Humanities Area.....	3
	Elective.....	3
Total	.....	16

JUNIOR YEAR

First Semester

Course No.	Course Title	Credits
BA 2161	Business Law I	3
EN 2226	Professional Communications	3
IT 2118	Web Design	3
IT 3104	Database Management Concepts.....	3
	Elective.....	3
Total	.....	15

Second Semester

EN 2028	Introduction to Literature	3
IT 2218	Advanced Programming	3

IT 3103	Information Systems	3
	Restricted Elective in BA	3
	Elective.....	3
Total		15

SENIOR YEAR

First Semester

Course No.	Course Title	Credits
BA 3127	Finance.....	3
IT 4109	Network Concepts	3
IT 4146	Systems Analysis and Design.....	3
LA 1060	Introduction to the Arts.....	3
	Elective.....	3
Total		15

Second Semester

IT 4208	Senior Projects in IT	3
IT 4235	Network Design and Administration....	3
LA 4037	Non-Western Societies	3
	Social Sciences Area	3
	Elective.....	3
Total		15

Restricted Electives in BA (6 credits, select two courses from the following list)

BA 2017	Principles of Marketing.....	3
BA 2210	Microeconomics	3
BA 3027	Human Resource Management.....	3
BA 3028	Supervision and Management.....	3
BA 3128	Electronic Commerce / B2B.....	3
BA 3129	Operations Management	3

Social Sciences Area: select one of the following:

LA 2012	Introduction to Sociology.....	3
LA 2036	Introduction to Psychology	3
LA 4203	Social Psychology and Human Interaction	3

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LA 2040	Modern History of Western Societies ...	3
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LA 2138	History of Western Civilization I.....	3
LA 3032	American History and Government since 1877.....	3
LA 4127	United States Foreign Policy	3

* Continuing Education (CE) students are NOT required to take these courses, but must substitute three credits of free elective courses.

** CE students are required to have a letter from their employer on file as to being successfully, gainfully employed for one year or more.

CRIMINAL JUSTICE ADMINISTRATION

Faculty:

David C. Whelan, Chairperson

Donna S. Kochis

The curriculum in Criminal Justice Administration is an interdisciplinary career program offering socio-psychological, business management, and administration preparation for students planning to enter the field of criminal justice in the American legal system. The program offers professional preparation through the study of criminal justice, sociology, psychology, business management, liberal arts and the science of investigation.

The curriculum prepares the student through specialized courses with the necessary knowledge of the subject field and the professional skills and state-of-the-art techniques required for a successful career. The curriculum integrates theory and practice for the development of the individual along with sound philosophical insights for understanding society and the ideals of the American system of justice.

Additionally, the curriculum offers to practicing criminal justice personnel opportunities for continued professional growth to assist in the educational growth and development of the communities served by the College. The DVC program fosters the advancement of knowledge and professionalism in the American legal system.

The curriculum helps to prepare the individual for management careers in law enforcement, corrections, probation and parole, security, and other aspects of the judicial system. It also serves as a preparation for students considering graduate or law school.

The total number of credits required for graduation with a degree in Criminal Justice Administration is 120 plus 4 credits earned for successful completion of the Employment Program.

RECOMMENDED COURSE SEQUENCE

FRESHMAN YEAR

First Semester

Course No.	Course Title	Credits
BA 1005	Introduction to Business	3
CJ 1009	Introduction to Criminal Justice.....	3
EN 1101	English I.....	3