

# Computer Technology, AAS

## PROGRAMMING

### School of Technology

#### Program Description

Behind every application lies a database or storage that is one of the most valuable assets of any enterprise – it is data. Developed in consultation with professionals in the field, the Computer Technology, Programming AAS program provides the student with a strong background in the programming and data extraction skills necessary for success as a programmer/coder by providing hands-on experience in Python, C++, JAVA, SQL and other software tools. Working independently or in teams, students learn to design, develop and debug programs to process this data to solve problems typically found in an enterprise.

#### Career Opportunities

Graduates of the Computer Technology, Programming AAS program may find employment as computer programmers/coders, junior systems analysts, programmer analysts, technical sales representatives, technical support analysts, or web developers. Job opportunities will be available with consulting firms, Internet companies, Web development firms, and in organizations requiring development of in-house decision support or ad hoc systems.

#### Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Analyze problems for development and design of information processing solutions.
- Use a programming language to develop efficient and well-structured application programs.
- Function as a member of a development team to determine program intent, output requirements, input needed and processing sequences for new programs.
- Maintain existing programs as internal and external requirements change.
- Develop test modules to verify program accuracy.
- Identify the resources needed to advance technical skills as the computer field changes.
- Develop oral, written, and listening communication skills.
- Integrate and apply mathematical skills to solve quantitative problems.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1		
	2	CPT 145	Introduction to Computer Technology	3		
	3	CPT 150	Microcomputer Concepts	3		
	4	CPT 156	Programming with Python	3		
	5	CPT 160	Introduction to Programming	3		
	6	ENG 161	College Writing	3	ENG 085 with Permission of Instructor, ENG 095 or Placement	
1st Spring	7	MTH 157	College Algebra	3	MTH 100 or Placement	Page 42 Column IV
	8	OFT 100	Basic Keyboarding	1		
	9	CPT 182	Operating Systems	3	CPT 145	
	10	CPT 180	C++ Programming	3	CPT 160	
	11	CPT 196	Access for Windows	3		
	12	ENG 162	Technical Communication	3	ENG 161	ENG 163
2nd Fall	13	CPT 235	Database Management Systems	3	CPT 196	
	14	CPT 163	Java Programming I	3	CPT 160	
	15	CPT 201	Web Content Development	3		
	16	CPT 203	HTML and CSS	3		
	17	CPT 271	PHP and SQL	3	CPT 196	
2nd Spring	18	CPT 206	JavaScript	3	CPT 203	
	19	CPT 213	Java Programming II	3	CPT 163	
	20	SOC 155	Principles of Sociology	3	Varies	Page 42 Column III
	21	CPT 286	System Analysis and Design	3		
	22	SPC 155	Effective Speech	3		SPC 156

Minimum Program Credits

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CPE