COMPUTER TECHNOLOGIES

Data Science and Programming Support Services

Data Science and Programming Support Degree - A25590DS
-Day and Evening
This curriculum prepares learners to design and develop desktop and web application with an emphasis on business logic and data-driven applications. Graduates will be proficient in Python, SQL, XML, database development, client/server-side JavaScript and Python. Graduates will be able to support the software development needs of businesses in a wide variety of industries, including healthcare, manufacturing, insurance, finance and software publishing.

Students will solve business computer problems through programming techniques and procedures. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, database specialists, software specialists, or information systems managers .

IT Foundations Certificate - C25590F
-Online
This certificate is designed to give individuals an all-around orientation to computer technologies. It is a recommended starting place for students who know they like computer technology, but are not sure what specific field of computers might be right to follow for their career. The courses introduce students to security, operating systems, programming, databases and other career options that involve computer technology. The courses also can prepare students for a variety of industry certifications

Database Programming - General Certificate - C25590GB
-Online
Designed for individuals interested in acquiring programming skills in databases.

Database Programming – Microsoft Certificate - C25590SQ
-Online
Designed for individuals interested in acquiring programming skills in Microsoft SQL databases.

Database Programming – Oracle Certificate - C25590OR
-Online
Designed for individuals interested in acquiring programming skills in Oracle databases.

Database Programming – SAS Certificate - C25590SS
-Online
Designed for individuals interested in acquiring programming skills in SAS databases.

Python Programming Certificate - C25590PY
-Online
Designed for individuals interested in acquiring programming skills in Python.

Programming Fundamentals Certificate - C25590PF
-Day
The Fundamentals of Computer Programming Certificate will give students the opportunity to achieve programming literacy.

Program Sequence

FIRST SEMESTER

CSC	120	Computing Fundamentals I	4
CSC	121	Python Programming	3
CTI	110	Web, Pgm, and DB Foundations	3
DBA	110	Database Concepts	3
MAT	152	Statistical Methods	4

SECOND SEMESTER

CSC	122	Python Applications	3
DBA	120	Database Programming I	3
ENG	111	Writing and Inquiry	3
CSC	124	Intro to Programming for Data Science	3
CTI	120	Network & Sec Foundations	3

FIRST SUMMER SEMESTER

CSC	174	Server-Side JavaScript	3
WEB	115	Web Markup and Scripting	3

THIRD SEMESTER

CTS	115	Info Sys Business Concepts	3
___	___	DBA Elective	3
CSC	221	Advanced Python	3
DBA	130	Introduction to NoSQL Databases	3
CSC	152	SAS	3

FOURTH SEMESTER

COM	120	Introduction to Interpersonal Comm	3
CSC	227	Cloud Applications	3
ECO	151	Survey of Economics	3
___	___	HUM/Fine Arts Elective	3
___	___	Major Elective	3

Humanities and Fine Arts
(Select 1 Courses)

ART	111	Art Appreciation	3
HUM	115	Critical Thinking	3
MUS	110	Music Appreciation	3
PHI	240	Introduction to Ethics	3

Major Elective
Select 3 hours from the following courses

CSC	116	Introduction to Functional Programming	3
CSC	153	C# Programming	3
CSC	154	Software Development	3
CTS	225	Spreadsheet Data Analysis	3
DBA	115	Database Applications	3
DBA	285	Data Warehousing and Mining	3
DBA	240	Database Analysis/Design	3

DBA Elective
Select 3 hours from the following courses

DBA	221	SQL Server DB Programming II	3
DBA	220	Oracle DB Programming II	3
DBA	224	SAS DB Programming II	3
DBA	223	MySQL DB Programming II	3

Graduation Requirements .... 68 Credit Hours