

# Information Technology

## Certificates of Proficiency

Programs **67529** CIP 521299  
**67541** 521201  
**67523** 521201

Certificates of Proficiency in Information Technology are intended to provide the technical material typically covered in an A.A.S. degree or to provide working students with opportunities to learn new skills.

The **Network Engineering Technology** Certificate of Proficiency (67529) prepares students for careers as network technicians, network managers, and network security specialists. Students who excel in their studies will be encouraged to seek formal certifications such as A+, NET+, Server+, Security+, and Linux+; as well as Microsoft's Certified Technology Specialist (MCTS), Certified IT Professional (MCITP), Certified Systems Administrator (MCSA), Certified Systems Engineer (MCSE), Cisco Certified Network Administrator (CCNA), and the Certified Information Systems Security Professional (CISSP).

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition I (3/0)	3
NET 102	Introduction to PC Hardware and Software (2/3)	3
NET 103	IT Essentials (2/3)	3
NET 104	Fundamentals of Computer Networks (2/2)	3
NET 120	Windows Desktop OS Administration (2/2)	3
NET 122	Windows Server OS Administration (2/2)	3
NET 124	Network Infrastructure Administration (2/2)	3
NET 126	Network Directory Services Administration (2/2)	3
NET 130	Interconnecting Network Devices (2/2)* <sup>1</sup>	3
NET 212	Linux (2/2)* <sup>2</sup>	3
NET 240	Network Security (2/2)* <sup>3</sup>	3
—	General Education elective	3
		36

\* Upon successful completion of these courses, students may wish to continue their studies in one or more of the following additional courses:

<sup>1</sup> NET 230 Advanced Switched Networks

NET 239 WAN Data Communications

<sup>2</sup> NET 214 Mastering Linux

<sup>3</sup> NET 244 Network Defense and Countermeasures

**Database Administration** (67541) teaches the skills to manage and maintain database management systems (DBMS) software. Mainstream DBMS software such as Oracle and Microsoft SQL Server are covered. Students who demonstrate solid academic performance will be encouraged to complete the MCDBA core examination.

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition I (3/0)	3
IST 123	Programming in Visual Basic.NET (2/2)	3
IST 134	Introduction to Oracle Database (2/2)	3
IST 223	Advanced Programming in Visual Basic.NET (2/2)	3
IST 252	Database Security (2/2)	3
IST 253	Database Concepts (2/2)	3
IST 254	Database Administration (2/2)	3
IST 260	SQL Server Database Design (3/2)	4
IST 261	SQL Server System Administration (3/2)	4
NET 104	Fundamentals of Computer Networks (2/2)	3
MAT —	Mathematics elective	3-4
		35-36

The **Project Management** Certificate of Proficiency (67523) furnishes students with the knowledge to simultaneously manage the four basic interrelated elements of a project: resources, time, money, and most importantly scope. Some courses are Project Management Institute (PMI) certified and are mapped to the PMI Project Management Body of Knowledge (PMBOK). The courses provide Professional Development Units (PDUs) for taking and maintaining Project Management Professional (PMP) certification. Courses are offered both in the classroom and online, and employ practical hands-on cases to develop student experience.

Code	Course (lecture/lab hours)	Credits
BUS 118	Introduction to Total Quality Management (3/0)	3
BUS 225	Employee Motivation and Leadership (3/0)	3
CIS 280	PC Applications: Project Management (2/2)	3
ENG 101	English Composition I (3/0)	3
IST 109	Introduction to Computer Programming (2/2)	3
IST 123	Programming in Visual Basic.NET (2/2)	3
IST 209	Project Management Concepts (2/2)	3
IST 256	System Analysis (2/2)	3
IST 257	Project Risk Management (2/2)	3
IST 259	Advanced Project Management (3/2)	4
MAT —	Mathematics elective	3-4
		34-35

**NOTE:** All program listings are subject to periodic updates. Please consult your program advisor, academic division, or [www.mccc.edu/programs\\_certificate](http://www.mccc.edu/programs_certificate)

