



COMPUTER NETWORKING TECHNOLOGIES

Program Options

Associate of Applied Science Degree
Postsecondary Technical Certificate

Pathways to Computer Networking Employment

The Computer Networking Technologies (CNT) program offers two completion options for the student interested in employment in one of the most dynamic and potentially lucrative job markets in today's world economy.

The Associate of Applied Science Degree (AAS) in Computer Networking Technologies is a two-year program designed to prepare students for employment in small, medium or large environments that may consist of multiple physical locations both local and remote with multiple domain controllers, and include network services such as messaging, database, file and print, proxy server, firewall, the internet, an intranet, remote access, and client computer management. Additionally, the program prepares students to become Microsoft Certified and Cisco Certified computer network technology professionals.

The Microsoft and Cisco certifications enable professionals to target specific technologies and distinguish themselves by demonstrating in-depth knowledge and expertise in the areas of implementing, building, troubleshooting, debugging, design, project management, operations management, and planning as related to computer network technologies. By validating a more comprehensive set of skills, these certifications provide students and their hiring managers a reliable indicator of on-the-job performance.

The AAS degree program assumes an intermediate level of computer knowledge at the beginning of the program. Students may demonstrate this level of knowledge with an IC3 certification, successfully passing CIS 101 with a minimum grade of "B", or equivalent training and expertise as demonstrated by portfolio and an instructor interview. It is recommended that all prospective CNT students visit with an instructor to review their particular qualifications and receive an overview of the entire program.

General education courses, included in the AAS degree program, provide the opportunity for students to develop critical and creative thinking, computation, and communication skills as well as other soft skills necessary for succeeding in the workplace. It is recommended that the majority of general education courses be completed prior to formal entry into the CNT courses.

The two-semester postsecondary technical certificate option is designed for students who are involved in the IT industry and have prior computer and networking skills. Students entering this Postsecondary Technical Certificate Program will take only those CNT courses offered in the third and fourth semesters of the AAS degree program with the goal being the obtaining of the knowledge and skills necessary for passing certification exams. Entry into the two-semester programs require instructor approval.

Industry Partners at EITC

EITC is a Novell Education Academic Partner (NEAP), a Microsoft IT Academy, a Cisco Networking Academy Program Regional Academy (CNAP) and a member of the CompTIA E2C program. These partnerships ensure that the instructors use industry-authorized curriculum and are qualified to teach the various Computer Networking Technologies options as well as provide discounts on certain certification exams.

Intended Learning Outcomes

- Work effectively with users to understand requirements for and solve problems associated with the computing environment.
- Install, configure, secure, troubleshoot, and maintain the hardware and software associated with computer systems in both standalone and network environments.
- Configure and troubleshoot a network infrastructure based upon Microsoft and Cisco networking technologies.
- Implement, monitor and troubleshoot Active Directory, secure domains, and perform backup, restore, and ensure trouble free operation.
- Configure, manage, monitor, and troubleshoot Terminal Services environments.
- Implement, monitor and maintain network servers including Web servers and network applications.
- Design a network infrastructure consisting of devices, servers and applications that meets business and technical requirements for network services.
- Install, operate, and troubleshoot enterprise networks consisting of network devices such as switches and routers.
- Employ professional and ethical behaviors that contribute to continued employability.

Industry Testing for Certification

Upon completion of the appropriate industry certification courses, students demonstrate proficiency by participating in the industry certification exam process. Certification exams are administered by EITC through VUE and Prometric. The first and second semesters provide preparation for one of the Microsoft and one of the Cisco certification exams that are required by EITC. Additionally in those semesters, students are prepared for up to four elective certification exams. The third and fourth semesters provide preparation for up to six Microsoft certification exams and the second Cisco certification exam. EITC students are required to take a total of six Microsoft certification exams and two Cisco certification exams. A technology fee of \$100 is assessed for each of the ten courses that are directly related to the EITC required industry certification exams. This technology fee covers the costs of students sitting for each of the eight required exams one time.

Program Costs

In addition to the registration and technology fees, a student in Computer Networking Technologies can expect to pay approximately \$600 per semester for books and supplies. In the first semester of the AAS program, students are required to purchase the parts for a computer, which they assemble as part of their course work. The cost of these parts is approximately \$1,000. Students, at their discretion, may elect to take more than the eight EITC required certification exams. Costs associated with sitting for these elective exams is not included in the technology fee and is the responsibility of the student. The average cost of these elective exams is \$125 per exam.

Microsoft Computer Networking Technologies*Associate of Applied Science Degree 81-82 Credits***Semester 1**

CNT 101	Microcomputer Concepts/Intro to Networking	4
CNT 103	Introduction to UNIX/Linux	3
CNT 121	Wireless LAN Administration	3
CNT 275	Cisco Internetworking Technologies	4
	General Education Course	3-4

Semester 2

CNT 122	Wireless LAN Security	3
CNT 150	Desktop/Client Computer Operating Systems	4
CNT 202	Advanced UNIX/Linux	4
CNT 276	Cisco Router Setup and Operation	4
ELC 203	Introduction to Computer Programming	3

Summer Term

	General Education Courses	9
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Semester 3

CNT 241	Application Infrastructure Configuration	4
CNT 243	Network Infrastructure Configuration	4
CNT 263	Active Directory Configuration	4
CNT 277	Cisco Network Segmentation and Protocol Encapsulation	4
	General Education Course	3

Semester 4

CNT 210	Supervised Work Experience	3
CNT 261	Server Administration	4
CNT 262	Network Infrastructure Planning	4
CNT 278	Cisco WAN Technologies	4
	Plus one CNT Elective	2-3

CNT Electives

CNT 222	Wireless LAN Analysis	3
CNT 242	Designing Security for Microsoft Networks	2
CNT 255	Exchange Server Administration	3
CNT 256	SQL Server Administration	3
CNT 257	Secure Web Access Using Microsoft Proxy Services	2
CNT 244	Biztalk Server Business Integration Solutions	4
CNT 245	Network Solutions for Small and Medium-Sized Businesses	3
CNT 246	Deploying Vista Desktops	3
CNT 247	Implementing Sharepoint Server	3
CNT 265	Implementing and Administering Security in a Microsoft Server Network Infrastructure	3

Required General Education Courses

A minimum of 16 transferable general education credits are required for this degree. Consult the general education section of this catalog for the general education requirements and the list of general education courses that satisfy these requirements.

Microsoft Certified Systems Engineer (MCSE) Certification Track*Postsecondary Technical Certificate 26-27 Credits***Semester 1**

CNT 241	Application Infrastructure Configuration	4
CNT 243	Network Infrastructure Configuration	4
CNT 263	Active Directory Configuration	4

Semester 2

CNT 150	Client Operating System Configuration	4
CNT 261	Server Administration	4
CNT 262	Network Infrastructure Planning	4
	Plus one CNT Elective	2-3

CNT Electives

CNT 222	Wireless LAN Analysis	3
CNT 242	Designing Security for Microsoft Networks	2
CNT 255	Exchange Server Administration	3
CNT 256	SQL Server Administration	3
CNT 257	Secure Web Access Using Microsoft Proxy Services	2
CNT 244	Biztalk Server Business Integration Solutions	4
CNT 245	Network Solutions for Small and Medium-Sized Businesses	3
CNT 246	Deploying Vista Desktops	3
CNT 247	Implementing Sharepoint Server	3
CNT 265	Implementing and Administering Security in a Microsoft Server Network Infrastructure	3

ENERGY SYSTEMS TECHNOLOGY**Program Options**

Technical Certificate

The Energy Systems Technology Program (EST) provides the “core” electronics curriculum that makes up the first year of a two year Associate Degree in one of three areas in the ESTEC program offered at Idaho State University (ISU). Students that complete the one year technical certificate are prepared to transfer to ISU to complete an associate degree.

ESTEC offers a unique approach to educating students by providing the specific knowledge and skills needed in electrical generation. The skills requirements have been developed in partnership with energy utilities and vendors to assure that program graduates enter the workforce with the precise skills required by industry. Students learn through traditional classroom experience as well as through extensive laboratory exercises. Electrical generation technologies addressed include nuclear, coal, gas, and renewable technologies such as wind, solar thermal energy, solar photovoltaic, geothermal, biomass, and hydro.

ESTEC is a public/private partnership between Idaho State University, Idaho National Laboratory, and Partners for Prosperity. Curriculum and laboratory resources were developed with external funding from the US Department of Labor and the National Science Foundation.

Employers include public utilities, independent energy generation companies, renewable energy producers, energy service companies, power generation equipment manufacturers, installers and constructors.

The courses listed in the program will be taught in sequential blocks of instruction. Successful completion of a course is required before the student can progress in the program.

Intended Learning Outcomes

- Prepare students to transfer to ISU to complete an associate degree in the ESTEC where they will be prepared for employment as Engineering Technicians meeting the skills and competencies required by the existing and growing electrical generation sector.

Program Costs

In addition to the semester registration fees, an ELT student can expect to spend approximately \$600 on books and hand tools for the one-year program.

Technical Certificate

36 Credits

Semester 1

ESE 100	Engineering Technology Orientation	1
ELT 141	Applied Mathematics I	4
ELT 153	Electronic Theory	5
ELT 155	Electronics Lab	5
COM 101	Fundamentals of Speech	3

Semester 2

ELT 142	Applied Mathematics II	4
ELT 154	Electronic Control Devices Theory	5
ELT 156	Electronic Control Devices Lab	5
PHY 101	Introduction to Physics	3
PHY 101L	Introduction to Physics Lab	1



LEGAL TECHNOLOGIES

Program Options

Associate of Applied Science Degree
Technical Certificate

The Legal Assistant option provides education for students to enter the legal paraprofessional field. The option requires students to study the practical application of civil litigation, criminal law, family law, bankruptcy, business law, and legal research. An emphasis is placed on the ethical considerations of working in a law firm, as well as the duties and tasks expected to be performed on the job.

The Legal Assistant option curriculum has been developed to incorporate core competencies established by the American Association of Paralegal Educators. This includes 19 credit hours in general education in addition to substantive law and office skills classes provided.

Entrance Requirements:

- COMPASS scores at or above 68 in reading and writing skills
- Applicants must demonstrate a keyboarding speed of 25 wpm with 90% accuracy at entry level. Students may arrange for a keyboarding test through Student Services.
- An interview with program director/instructor
- Must be bondable (consult the program instructor for additional information.)

Intended Learning Outcomes

- Work independently and as a team member to complete legal projects within specific time frames by effectively demonstrating time management, organization and prioritization skills.
- Effectively read, analyze, and synthesize complex information in an organized and logical manner.
- Draft essential legal pleadings, motions, discovery, and related documents needed in the litigation process.
- Demonstrate knowledge in basic legal theories, doctrines, and principles that comprise the basis of law, with specific emphasis on civil litigation, estate planning, family, criminal, and business law.
- Demonstrate essential employability behaviors including attendance, attention to detail, confidence, collaboration, problem-solving, and meeting deadlines.
- Utilize legal-research skills to find and research statutes, case law, procedural rules and other primary source materials.
- Represent the legal profession in a professional and ethical manner.

Program Costs

The Legal Assistant should expect to spend approximately \$600 for books and supplies the first year and \$600 the second year. Legal Technologies students are strongly encouraged to participate in their respective student organizations. Graduates are required to sit for proficiency exams at the conclusion of their program. Information regarding costs and dates for the exams will be posted in the online catalog and available from the program instructor(s).

Industry Testing for Certification

Upon completion of the Legal Assistant program, graduates must demonstrate proficiency by participating in the industry certification exam process. Certification exams are administered under the direction of NALS the association for legal professionals. A certification fee of approximately \$50 is assessed for courses that are directly related to industry certification exams. This certification fee covers the costs of students sitting for each of the required exams. See program advisor for further details.

Legal Assistant

Associate of Applied Science Degree

73 Credits

Semester 1

BOT 151	Leadership I	1
CIS 101	Computer Information Systems	3
LGL 101	Introduction to Legal Assisting	3
LGL 103	Legal Terminology	3
LGL 104	Legal Document Drafting	3
OFP 110	Keyboarding	3

Semester 2

OFP 142	Business Spreadsheets	3
BOT 152	Leadership II	1
LGL 102	Law Office Procedures & Technology	3
LGL 110	Civil Litigation I	3
OFP 118	Word Processing	3
	General Education Course	3

Summer Term

General Education Courses	6-7
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Semester 3

LGL 211	Civil Litigation II	3
LGL 216	Legal Assistant Practices	2
LGL 218	Basic Legal Research	3
OFP 204	Advanced Word Processing	2
	General Education Course	6

Business, Office, and Technology