



CERTIFICATE PROGRAMS

Pellissippi State offers high-quality, short-term training in the form of certificates. Individual curricula are designed for working students who wish to upgrade their skills or gain additional certification in a particular area.

Students wishing to pursue a certificate should apply for admission as a “special” student and indicate on the application the certificate in which they are interested. The placement test and/or academic development courses are not required of students working on certificates. Students working on a certificate in conjunction with a degree program must meet admission requirements for the degree program. All courses for a certificate must be taken for credit.

Minimum grade-point average. A cumulative grade-point average (GPA) of at least 2.0 in all certificate coursework at Pellissippi State is required for a certificate.

Pellissippi State offers the following certificates:

- A+/Network+ Certification Preparation
- Accessible Web Design and Compliance
- Accounting Specialist
- Architectural AutoCAD Applications
- Basic Photography
- Digital Imaging for Photography
- Document Specialist
- E-Commerce Web Design
- Electronic Health Records Specialist
- Electronics Technology
- Game and Simulation Design
- General Culinary Arts
- General Hospitality
- Industrial Maintenance Technology
- Information Systems Fundamentals
- Medical Insurance Coding and Reimbursement
- Medical Transcription
- Mobile Web Design
- Pre-business Transfer
- Promotion Methods
- Sound Production
- Supervision
- Surveying
- University Computer Science Preparation
- Video Editing
- Videography
- Web Design Tools
- Web Page Authoring

A+/NETWORK+ CERTIFICATION PREPARATION

A+/Network+ provides students with the entry-level knowledge, skills and experience required for employment in the field of computer systems support. Students who complete the certificate will be able to install, configure, upgrade, diagnose and troubleshoot typical PC hardware and software; identify and respond to the needs of networked PC users; and address PC network connection problems, security issues and other infrastructural challenges. Graduates may apply certificate credits earned toward an associate's degree in Computer Science & Information Technology–Networking and Communications Systems.

CSIT 1710	A+ Computer Hardware.....	4
CSIT 1720	A+ Computer Software	4
CSIT 1730	Networking Fundamentals.....	4

TOTAL HOURS REQUIRED: 12

ACCESSIBLE WEB DESIGN AND COMPLIANCE

The Accessible Web Design certificate will equip individuals with the knowledge, skills, and experience required to create, design, and develop Web sites which are fully accessible to individuals with disabilities. The certificate was designed for working professionals to broaden or update existing skills or for those seeking to develop basic skills in accessible Web design. The courses provide the opportunity to learn techniques and industry standards for designing Web sites in accordance with universal Web design standards and Web Accessibility Guidelines as defined in Section 508 of the Rehabilitation Act.

Courses for this certificate may be applied toward an associate's degree.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

WEB 1600	Web Design I: Introduction to Web Design....	3
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Core Course(s)

WEB 2010	Web Design II: Design Fundamentals.....	3
WEB 2120	Audio/Video for the Web.....	3
WEB 2401	Accessible Web Design and Compliance	3

TOTAL HOURS REQUIRED: 12

ACCOUNTING SPECIALIST

Accounting Specialist is designed to provide students with the entry-level knowledge, skills and experience required for employment in the field of accounting and tax preparation. Basic financial statement preparation, recording business transactions, basic payroll functions, fixed asset accounting and basic individual taxation and tax preparation are some of the critical work functions that will be addressed in the certificate. Graduates may apply certificate credits

earned toward an associate's degree in Business Administration–Computer Accounting.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

ACC 2000	Principles of Accounting I	3
BUSN 1211	Introduction to Software Applications	3

Core Course(s)

ACC 2030	Principles of Accounting II.....	3
ACC 2410	Income Taxation.....	3

TOTAL HOURS REQUIRED: 12

ARCHITECTURAL AUTOCAD APPLICATIONS

The Architectural AutoCAD Certificate introduces basic AutoCAD, drafting standards and other software applications used in the construction industry. Traditional 2D drawings of plans, sections, details and elevations will be drawn according to industry standards. The certificate classes will also cover 3D modeling as it relates to building components, and 3D modeling as implemented for the Building Information Modeling (BIM) environment.

Foundation Course(s)

ENGT 1100	Fundamentals of Technical Drawing W/Lab..	3
CID 1210	Architectural Drawing W/Lab.....	4
CID 2112	Architectural 3D Modeling W/Lab.....	4
CID 2150	Advanced AutoCAD W/Lab.....	4

Core Course(s)

TOTAL HOURS REQUIRED: 15

BASIC PHOTOGRAPHY

The Basic Photography curriculum is designed for the amateur or media professional interested in adding fundamental photography skills. It is also a career option for someone interested in working as a photofinishing lab technician or in the photographic support industry. The certificate is useful for someone who uses photography as part of his or her profession, such as in the medical industry or law enforcement, but who needs additional photographic skills. All of the courses are hands-on and practical and are taught by experienced professionals.

Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence, with the exception of Advanced Track (PHO 1890 cannot be taken before PHO 1700).

Foundation Course(s)

PHO 1000	Photography I.....	3
CGT 1030	Introduction to Macintosh Graphic Design....	3
PHO 1100	Photography II	3
PHO 2010	Digital Imaging and Workflow	3
PHO 1700	Introduction to Studio Photography	3
PHO 1890	Photography Portfolio	1

Core Course(s)

TOTAL HOURS REQUIRED: 16

DIGITAL IMAGING FOR PHOTOGRAPHY

The Digital Imaging for Photography curriculum is designed for the amateur or media professional interested in adding digital imaging/editing and photo manipulation skills. It is also a career option for someone interested in working as a digital imaging technician in the photographic support industry. The certificate is useful for someone who uses imaging software like Adobe Photoshop® as part of his or her profession, or those amateurs wishing to broaden their artistic capabilities. All of the courses are hands-on and practical and are taught by experienced professionals.

Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

MDT 1000	Introduction to Media Technology	3
CGT 1030	Introduction to Macintosh Graphic Design....	3
PHO 2010	Digital Imaging and Workflow	3
PHO 2060	Advanced Digital Imaging.....	3

Core Course(s)

TOTAL HOURS REQUIRED: 12

DOCUMENT SPECIALIST

Document Specialist provides entry-level knowledge, skills and experience required for employment in business and industry offices. Fundamental computer concepts, word processing and spreadsheet operations and basic web editing, graphics and design are critical work functions encompassed in the certificate. Graduates may apply certificate credits earned toward an associate’s degree in Administrative Professional Technology–Business Concentration.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

ADMN 1005	Word.....	3
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WEB 1600	Web Design I: Introduction to Web Technology.....	3
<u>Core Course(s)</u>		
ADMN 2120	Document, Design & Editing	3
ADMN 2621	Excel.....	3
TOTAL HOURS REQUIRED:		12

E-COMMERCE WEB DESIGN

Today, e-commerce sites depend on a multitude of factors to determine their success. The E-Commerce Design certificate provides an overview of e-commerce and Web page design for use in marketing and selling online. The courses provide techniques to plan and to design a platform-independent commerce Web site. They focus on web business strategies, the hardware and software tools necessary for Internet commerce, comparison and selection of commerce architecture, security considerations, and the planning of a complete business-to-consumer and business-to-business site.

Courses for this certificate may be applied toward an associate’s degree.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

WEB 1600	Web Design I: Introduction to Web Design....	3
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Core Course(s)

WEB 2010	Web Design II: Design Fundamentals.....	3
WEB 2220	E-Commerce	3
WEB 2603	Server-Side Web Development (PHP/ASP)	3

TOTAL HOURS REQUIRED:		12
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ELECTRONIC HEALTH RECORDS SPECIALIST

Electronic Health Records Specialist Certificate provides the knowledge, skills and experience required for entry-level employment in medical offices. Upon completion of the certificate, students will be able to convert, implement and manage electronic records. Graduates may apply certificate credits earned toward an associate’s degree in Administrative Professional Technology–Health Care Office Administration.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

ADMN 1005	Word.....	3
ADMN 2910	Medical Terminology I	4

Core Course(s)

ADMN 2921	Medical Terminology II.....	3
ADMN 2340	Database & Records Management	3

TOTAL HOURS REQUIRED: 13

ELECTRONICS TECHNOLOGY

Electronics Technician provides upgrading of skills for those presently in the electronics and computer related fields or provides basic skills for those who want to enter these fields. The certificate is based on the skills required of an electronics technician including soldering, application of electronic measuring equipment (e.g., oscilloscope and multimeter), electronic circuit simulation software, DC/AC circuit principles, computer hardware, analog devices, and digital devices. In addition, the students will learn basic troubleshooting skills applied to electronic systems. Students are encouraged to pursue A+ certification or CET certification upon completion of this program. High school graduate reading and writing skills are expected, as development of technical reports and use of technical manuals are required in these courses. Math skills should include practical knowledge of algebra, basic trigonometry and geometry. All courses may be applied toward the associate’s degree in EET.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

EET 1001	Intro to EET	1
EET 1012	Electrical Circuits I W/Lab.....	3
EET 1715	Microcomputer Architecture.....	2

Core Course(s)

EET 1210	Active Devices I W/Lab.....	4
EET 1310	Digital Fundamentals W/Lab.....	4

TOTAL HOURS REQUIRED: 14

GAME AND SIMULATION DESIGN

Game and Simulation Design provides hands-on, project-oriented learning opportunities for the design of game and simulation products. Appropriate software will be used to create products for popular game consoles, the online environment and as standalone end products. Commercial-level products will be prototyped, developed and tested. Both individual and team-based project development will make up part of this certificate.

Courses in each level (Core, Advanced Track I and Advanced Track II) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Core Course(s)

MDT 1600 *	Game & Simulation Design & Development Introduction	3
MDT 1620	Game & Simulation Design I	3

Advanced Track Course(s) I

CGT 2160	3D Modeling & Animation	3
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Advanced Track Course(s) II

MDT 2670	Game & Simulation Design in 3D	3
MDT 2680	Game & Simulation Practicum.....	3

TOTAL HOURS REQUIRED: 15

* The prerequisites/corequisites for MDT 1600 and MDT 2100 are not required for certificate students.

GENERAL CULINARY ARTS

General Culinary Arts provides the skills to use industry-standard tools for careers in the hospitality/restaurant/catering and general food service industries. The certificate is designed to train individuals to obtain meaningful work within the culinary level of the food service industry and provide a stepped process for future culinary arts degrees as well as ascension to the varied levels of chef positions within said the industry. Graduates may apply certificate credits earned toward an associate’s degree in Business Administration–Culinary Arts.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level.

Foundation Course(s)

CULN 1000	Kitchen Skills I	1
CULN 1100	Kitchen Skills II	1
CULN 1200	Kitchen Skills III	2
HSP 1400	Safety & Sanitation.....	2
HSP 2250	Professional Catering.....	3

Core Course(s)

HSP 1420	Nutrition for Culinary Arts	3
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TOTAL HOURS REQUIRED: 12

GENERAL HOSPITALITY

General Hospitality Certificate provides the entry-level skills and industry knowledge to enable progression in a hospitality professional career. This certificate is designed to enable the recipient to gain meaningful employment in hotel, restaurant and tourism-related opportunities. Graduates may apply certificate credits earned toward an associate’s degree in Business Administration–Hospitality.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

HSP 1200	Introduction to Hospitality	3
HSP 2300	Food & Beverage Operations	3

Core Course(s)

HSP 2220	Tourism & Travel	4
HSP 2260	Hotel Operations	3

TOTAL HOURS REQUIRED: 13

INDUSTRIAL MAINTENANCE TECHNOLOGY

Industrial Maintenance Certificate provides upgrading of skills for those presently in the manufacturing field or basic skills for those who want to enter the field. The certificate is based on developing preventive and predictive skills in the following areas: print reading, applied mathematics, hydraulics, pneumatics, power trains, mechanisms, electronics, and PLCs. Courses for this certificate may be applied toward an associate’s degree. High school graduate reading and writing skills are expected, as development of technical reports, use of technical manuals and interpretation of codes are required in these courses. Math skills should include practical knowledge of algebra, basic trigonometry, and geometry.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

EET 1012	Electrical Circuits I W/Lab	3
ENGT 1010	Engineering Technology Applications & Communications	3
MET 1022	Shop Practices.....	3
MET 1060	Maintenance Printreading Applications W/Lab	3

Core Course(s)

EET 2920	Programmable Controllers.....	2
MET 2022	Fluid Mechanics & Power Applications	3
MET 2030	Machine Elements W/Lab.....	3

TOTAL HOURS REQUIRED: 20

INFORMATION SYSTEMS FUNDAMENTALS

Information Systems Fundamentals provides entry-level knowledge, skills and experience in the fields of database applications and computer programming. Creating and modifying basic Java applications; using the standard operating system and office applications software; applying current database development concepts for implementation and retrieval; and creating simple

web pages are some of the critical work functions that will be addressed in the certificate. Graduates may apply certificate credits earned toward an associate’s degree in Computer Science and Information Technology–Programming or Computer Science & Information Technology–Database Design and Development.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

CSIT 1110 Introduction to Information Technology 4

Core Course(s)

CSIT 1510 Introduction to Programming Using Java 4

CSIT 1810 Introduction to Database Design 4

TOTAL HOURS REQUIRED: 12

MEDICAL INSURANCE CODING AND REIMBURSEMENT

Medical Insurance Coding and Reimbursement prepares individuals for employment in medical insurance and health-care claim processing. Classroom instruction includes use of CPT-4- and ICD-9-CM as well as the processing of medical insurance claims and medical billing procedures. Students completing the curriculum may wish to take the professional certification exam offered through the American Academy of Professional Coders (AAPC) or the American Health Information Management Association (AHIMA). Graduates may apply certificate credits earned toward an associate’s degree in Administrative Professional Technology–Health Care Office Administration.

Courses in each level (Foundation, Core, Advanced Track I and Advanced Track II) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

ADMN 1005 Word 3

ADMN 1100 * Keyboarding & Basic Computer Skills 3

ADMN 2910 Medical Terminology I 4

Core Course(s)

ADMN 2621 Excel 3

ADMN 2921 Medical Terminology II 3

Advanced Track Course(s) I

ADMN 2940 Medical Insurance Coding 3

Advanced Track Course(s) II

ADMN 2945 Insurance Billing & Coding 3

ADMN 2950 Health Care Insurance Survey 3

TOTAL HOURS REQUIRED: 19-25

* May be waived if student types 28 wpm.

MEDICAL TRANSCRIPTION

Medical Transcription prepares individuals to understand the language of science and medicine and to prepare accurate documentation in health information professions. Career opportunities exist in medical record transcription. Some of the courses required for the certificate can also be applied toward the associate's degree, should the student so desire. Students receiving this certificate should be able, after meeting necessary entrance requirements, to pass the AHDI National Certification.

Courses in each level (Foundation, Core and Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

ADMN 1005	Word	3
ADMN 1100 *	Keyboarding & Basic Computer Skills	3
ADMN 2910	Medical Terminology I	4

Core Course(s)

ADMN 2120	Document Design & Editing	3
ADMN 2921	Medical Terminology II	3

Advanced Track Course(s)

ADMN 2932	Medical Reports	3
ADMN 2935	Medical Transcription	3

TOTAL HOURS REQUIRED: 16-22

* May be waived if student types 28 wpm.

MOBILE WEB DESIGN

The Mobile Web Design certificate equips individuals with the knowledge, skills, and experience required to create, design, and develop Web sites for mobile devices (e.g., smartphones, handheld devices). The certificate provides students the opportunity to use WML, XHTML, and CSS to create mobile content with particular emphasis on interface design, usability, and aesthetic style. Students learn to author and design sites that comply with current standards, guidelines, and regulations pertaining to small screens and mobile technology. With the increasing popularity of mobile computing, Web designers realize that they must develop skill in producing and/or redesigning mobile Web sites.

Courses for this certificate may be applied toward an associate's degree.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

WEB 1600	Web Design I: Introduction to Web Design....	3
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SOUND PRODUCTION

Sound Production is designed for working professionals seeking to broaden or update their existing skills. It is also designed for students who want to complement their skills from a related degree concentration in Media Technologies, such as Communication Graphics Technology, Photography or Web Technology. This option is designed for individuals interested in digital audio recording and mixing with contemporary tools for film and video.

Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

VPT 1015	Sound Production.....	3
VPT 2015	Pro Tools	3

Core Course(s)

VPT 2016	Advanced Pro Tools	3
VPT 2960	Remote Field Production	
or VPT 1022	Guerrilla Filmmaking.....	3

TOTAL HOURS REQUIRED: 12

SUPERVISION

Supervision allows new or potential supervisors to acquire necessary supervisory skills. In addition, the program will help current supervisors update their skills. Graduates will be equipped with entry-level knowledge, skills and experience required to enhance their employment opportunities and advancement in the field of management. Graduates may apply certificate credits earned towards an associate's degree in Business Administration–Management.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

MGT 2000	Principles of Management	3
BUSN 1211	Introduction to Software Applications	3

Core Course(s)

MGT 2030	Team Leadership.....	3
MGT 2050	Human Resources	3

TOTAL HOURS REQUIRED: 12

SURVEYING

Surveying provides the basic skills needed to enter a career in surveying. Courses are offered both day and night. Normally, night sections meet one or two nights each week during the semester.

Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

CET 0100 *	Introduction to Surveying.....	3
SURV 1550	Surveying Principles W/Lab.....	4
SURV 2510	Advanced Surveying W/Lab.....	4

Core Course(s)

SURV 2567	Positioning With GPS	3
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Advanced Track Course(s)

SURV 2520	Legal Aspects of Surveying.....	3
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TOTAL HOURS REQUIRED: 14-17

* CET 0100 may be waived at the discretion of the program coordinator with demonstrated competence.

UNIVERSITY COMPUTER SCIENCE PREPARATION

University Computer Science Preparation provides the entry-level knowledge, skills and experience required for upper division study in the field of computer science at a four-year college or university. Upon completion of the certificate, graduates will be able to use the syntax and semantics of a programming language; write and debug well-structured programs; demonstrate proficiency in Unix ; design, implement and test simple to moderately complex digital systems; and work comfortably with functional notation. Graduates may use certificate courses toward an associate of science degree.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

CSIT 1020	Introduction to Computer Science.....	4
MATH 1910	Calculus I	4

Core Course(s)

CSIT 1400	Data Structures	4
CSIT 1600	Computer Organization	4

TOTAL HOURS REQUIRED: 16

VIDEO EDITING

Video Editing is designed for working professionals seeking to broaden or update their existing skills. It is also designed for students who want to complement their skills from a related degree concentration in Media Technologies (Communication Graphics Technology, Photography, or Web Technology). The Video Editing certificate covers editing theory using nonlinear systems with extensive hands-on training with the most popular editing applications.

WEB 2120	Audio/Video for the Web.....	3
WEB 2703	Adobe Acrobat	1
TOTAL HOURS REQUIRED:		13

WEB PAGE AUTHORIZING

The Web Page Authoring certificate is designed for students who wish to learn how to write and code (author) Web page content. Students will learn about Web design, HTML, and Cascading Style Sheets (CSS) and how to create sites both manually and through the use of Web site development software. With the introduction of HTML5 and CSS3, even seasoned Web professionals need a refresher course in the new Web standards. The Web Page Authoring certificate provides a tool set necessary for a successful career as a Web page content designer.

Courses for this certificate may be applied toward an associate’s degree.

Courses in each level (Foundation and Core) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

MDT 1950	Digital Screen Design.....	3
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Core Course(s)

WEB 1600	Web Design I: Introduction to Web Design....	3
WEB 2000	Dreamweaver/Fireworks.....	3
WEB 2010	Web Design II: Design Fundamentals.....	3

TOTAL HOURS REQUIRED:		12
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HOW TO APPLY FOR CERTIFICATES

Students planning to complete certificate requirements must complete and submit the Certificate Application prior to the semester that they intend to complete the certificate. Students planning to complete the certificate requirements in the same semester must submit a Certificate Application within 14 days of the first day of classes. Forms may be obtained in Enrollment Services or Business and Community Services on the Pellissippi Campus or the Business/Records Office at the off-site campuses. Certificate applicants are exempt from paying the graduation fee and from taking the CBASE exit exam. As soon as grades are posted and the completed certificates are received, they will be mailed to the student.

