Lane Community College SM

2011 - 2012
Career and Technical Programs

Computer Information Technology Department
541.463.5826

lanecc.edu

Computer Systems Support

Two-Year Associate of Applied Science Degree

Purpose Systems support workers provide technical assistance and support services to computer system users. They answer questions and resolve technology problems for work colleagues or clients in face-to-face contacts, via telephone or remote contacts, via e-mail or on support Web sites. They assist users with computer hardware, software, network connections, and operating procedures. Some systems support workers evaluate computer products, perform user needs assessments, install systems, prepare documentation, and provide training for users.

Learning Outcomes Graduates will be able to:

- use primary features of computer hardware and operating systems
- make productive use of application and operating system software
- read and understand operating manuals
- assist co-workers or clients with hardware and peripheral problems
- assist co-workers or clients with software problems
- perform common network administrative tasks
- monitor and troubleshoot network operation
- monitor computer and peripheral device operation
- advise users on computer security problems and strategies
- provide technical support services to computer users
- use appropriate user interaction methods
- test and troubleshoot computer applications and systems
- follow computer diagnostic procedures
- assess computer users' requirements and requests
- evaluate and recommend computer equipment and software
- perform hardware installation, maintenance and common repair tasks
- update and upgrade computer systems
- advise users on ergonomic uses of technology
- apply standard project management techniques
- work as a member of a team
- prepare documents and written communications for end users
- design and maintain support information on web sites
- use information resources for problem solving and troubleshooting
- explain concepts, components and processes to users
- prepare and deliver training materials for users
- maintain knowledge, skills and abilities through professional development

Employment Trends

- Lane County openings – 33 annually projected through 2018
- Statewide openings – 286 annually projected through 2018

Wages

- Lane County – entry-level $13.23 per hour; average $21.80 per hour; $46,000 annually
- Statewide – entry-level $12.86 per hour; average $21.67 per hour; $45,000 annually

Costs in Addition to Tuition (estimate)*

Books and materials	$2600
CIT lab fees	$275
Total	$2875

* Subject to change without notice.

Program lead Contact the Business and Computer Information Technology Division (BCIT), Bldg. 19, Rm. 137, 541.463.5221, *BCITAdmin@lanecc.edu.*

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Division, Bldg. 19, Rm, 231, 541.463.5203.

Two-Year Associate of Applied Science

Suggested Program Prerequisites

- Take foundational writing courses to be prepared for WR 121 Academic Writing
- Take mathematics courses to be prepared for MTH 095 Intermediate Algebra
- Take study skills courses such as EL 115 Effective Learning to prepare for college-level coursework
- Take computer classes or self-study equivalent to CIS 101 Computer Fundamentals

Students who need to take additional coursework to meet the entry prerequisites for the program should expect to spend additional terms beyond the six terms described below.

Elective Clusters

Elective clusters are intended to provide an opportunity for Systems Support majors to take additional coursework in their areas of special interest. Systems Support majors take a minimum of two elective clusters of at least three courses from among these choices. Substitutions must be pre-approved by a counselor or advisor. Note that some elective courses may require additional prerequisites: consult the course catalog for prerequisites and terms courses are offered. Pathways certificates are available in some elective clusters.

Computer Systems Support

Required courses

First Year	**Fall**
CIS 100 Computing Careers Exploration	2
CIS 140 Operating Systems: Managing Windows	4
WR 121 Composition: Introduction to Academic Writing	4
MTH 095 Intermediate Algebra or higher	5
Total Credits	15
	Winter
CIS 102 Problem Solving with Computers	4
CS 179 Introduction to Computer Networks	4
ET 287 Microcomputer Hardware	4
ART 288 Introduction to Web Design	2
CS 195 Web Authoring 1	3
Total Credits	17
	Spring
CIS 125D Software Tools 1: Databases	4
Choice of (see note 1):	
CS 133JS Beginning Programming: JavaScript	4
CS 133C# Beginning Programming: C#	4
CG 203 Human Relations at Work	3
CIS 227N Systems Support: Network and Operating Systems	4
Total Credits	15
Second Year	**Fall**
CIS 225 Computer End-User Support	4
WR 227 Technical Writing	4
Choice of one course from Elective Cluster 1	4
Choice of one course from Elective Cluster 2	4
Total Credits	16
	Winter
CS 280SS Coop Ed: Systems Support	3
Speech Requirement (see note 2)	3
Choice of one course from Elective Cluster 1	4
Choice of one course from Elective Cluster 2	4
PE/Health requirement	3
Total Credits	17
	Spring
CIS 245 Managing Technology Projects	4
CS 280SS Coop Ed: Systems Support	3
Choice of one course from Elective Cluster 1	4
Choice of one course from Elective Cluster 2	4
Total Credits	15

1 Other introductory programming courses may substitute for CS 133: CIS 122 Software Design, CS 133G Beginning C++, or CS 161 Computer Science 1.

2 Choice of recommended speech courses:
SP 111 Fundamentals of Public Speaking....4
SP 130 Business and Professional Speech....4
SP 218 Interpersonal Communication....4
SP 219 Small Group Discussion....4
SP 220 Communications, Gender, and Culture....4

Network: Windows cluster

CS 279W Windows Server Administration	4
CS 284 Network Security Fundamentals	4
CS 188 Wireless Networking	4

Network: Unix/Linux cluster

CIS 140U Introduction to Unix/Linux	4
CS 240 Advanced Unix/Linux: Server Management	4
Choice of:	
CS 188 Wireless Networking	4
CS 289 Cisco Router and Switch Administration	4

Health Informatics cluster

HI 101 Introduction of Health Care and Public Health	3
HI 107Working with Health IT Systems	4
Choice of:	
HI 111 Selecting, Implementing and Customizing Electronic Health Record Systems	4
HI 208 Installation and Maintenance of Health IT Systems	4

Geographic Information Systems cluster

GIS 245 Maps and Spatial Information	4
GIS 246 Introduction to GIS	4
Choice of:	
CIS 247 Information Analysis and Visualization	4
GIS 248 Applications in GIS	4

Database cluster

CIS 244 Systems Analysis	4
CS 275 Database Program Development	4
CS 276 Advanced SQL	4

Web Programming: PHP cluster

CIS 244 Systems Analysis	4
CS 295P Web Development 1: PHP	4
CS 296P Web Development 2: PHP	4

Web Programming: C#/.NET cluster

CS 233C# Intermediate Programming: C#	4
CS 295A Web Development 1: ASP.NET	4
CS 296A Web Development 2: ASP.NET	4

Communication skills cluster

BA 101 Introduction to Business	4
BT 112 Team Building Skills	4
Choice of:	
BA 206 Management Fundamentals	3
BA 278 Leadership and Team Dynamics	4

Standard footnotes:
* Prerequisite required
B Must be passed with grade of "B" or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement
R Required for AAS degree