

# Earn&Learn

with Lake Region State College

## LRSC DUAL MODEL FOR INFORMATION TECHNOLOGY

**Developed with specific sub-plan for  
Cyber Security to include these courses  
as electives:**

### Subplan 2:

CIS 142	Ethical Hacking & Network Defense	3 cr
CIS 147	Principles of Security	3 cr
CIS 241	Introduction to Digital Forensics	3 cr
CIS 255	Computer & Network Security	3 cr

Coursework is competency-based, it is possible to receive credit for academic achievement through testing, etc. For the Apprenticeship, the pre-apprenticeship courses, credit is as follows:

- CIS 128 and 129 - ability to pass certification test A+ (2 parts)
- CIS 164, CIS 122 and CIS 141 - LRSC IT faculty checks to prove competency

**NOTE:** LRSC agrees to have a third party review the competencies in the apprenticeship program as related to academic credit toward the degree. RACC=Registered Apprenticeship-College Consortium. LRSC agrees to develop the competency, knowledge requirements and skill capabilities in partnership with the industry partner for academic credit.

**NOTE:** 1 class = 45 hours for purposes of credit toward the apprenticeship.



ACADEMIC AAS DEGREE: 2 YEARS		APPRENTICESHIP: 2.5 YEARS	WAGE LEVEL	HOURS
ACADEMIC 1 <sup>ST</sup> SEMESTER / APPRENTICESHIP PRE-ENTRY				
CIS 141 Introduction to Cyber Security 3 cr	CIS 104 3 cr	Not employed with industry partner/pre-apprenticeship.  *Credits are recommended, but not required if demonstrates or acquires basic knowledge, skill and competency in subject matter upon hire.		Credits can be obtained through dual credit or summer courses.
CIS 128 Microcomputer Hardware 3 cr	CIS 128 3 cr*			
CIS 164 Networking Fundamentals 3 cr	CIS 129 3 cr*			
CIS 255 Computer and Network Security 3 cr	CIS 141 3 cr*			
ENGL 110 College Composition I or ENGL 125 Introduction to Professional Writing 3 cr	CIS 164 3 cr*			
	CSCI 101 3 cr			
	CSCI 122 3 cr			
Academic Credits: 15   Total Credits: 15		Academic Credits: 21   Total Credits: 21		
ACADEMIC 2 <sup>ND</sup> SEMESTER				
CIS 129 Microcomputer Hardware II 3 cr	CIS 142 3 cr	Begin Apprenticeship	FT employee	
CIS 220 Operating Systems - Unix 3 cr	CIS 147 3 cr	A1 Employee		FT student
CSCI 124 C++ Programming 3 cr	CIS 165 3 cr			
CIS 202 Advanced Software 3 cr	CIS 202 3 cr			
CIS 165 Networking Fundamentals II 3 cr	CIS 220 3 cr			
	Begin OJT training to replace above coursework plus mentorships			
Academic Credits: 15   Total Credits: 30		Academic Credits: 15   Total Credits: 36		
SUMMER SEMESTER		12 weeks x 40 hours as Apprentice (no classes = 480 hours)		
MATH 103 College Algebra 3 cr		Begin Apprenticeship	FT employee	
ENGL 120 College Composition II 3 cr		A1 Employee		
Academic Credits: 6   Total Credits: 36		Academic Credits: 0   Total Credits: 36		
ACADEMIC 3 <sup>RD</sup> SEMESTER				
CIS 142 Ethical Hacking 3 cr	CIS 255 3 cr	Must complete coursework and 4 GenEd before certification and move to A2 Employee status	FT employee	
CIS 147 Principles of Security 3 cr	CIS 124 3 cr		FT student	
CSCI 101 Intro to Computers 3 cr	OJT training to replace above coursework plus mentorships		Certification in IT	
HPER 101 or 102 Activity 1 cr				
GenEd Humanities or Social Science 3 cr				
Academic Credits: 13   Total Credits: 49		Academic Credits: 6   Total Credits: 42		
ACADEMIC 4 <sup>TH</sup> SEMESTER				
BADM 291 Career Seminar 2 cr	BADM 291 2 cr	A3 Employee	FT employee	
CIS 241 Intro to Digital Forensics 3 cr			FT student	
CIS 104 Microcomputer Database 3 cr				
COMM 110 Fundamentals of Public Speaking 3 cr				
HPER 101 or 102 Activity 1 cr				
GenEd Humanities or Social Science 3 cr				
Academic Credits: 15   Total Credits: 64		Academic Credits: 2   Total Credits: 44		
		20 GenEd Credits required for AAS to be taken throughout apprenticeship		
		COMM Fundamentals of Public Speaking 3 cr		
		ENGL 110 College Composition I 3 cr		
		ENGL 120 College Composition II or ENGL 125 Introduction to Professional Writing 3 cr		
		HPER (Health, Physical Education, Recreation) 2 cr		
		Humanities/Social Science/History 6 cr		
		MATH 103 College Algebra 3 cr		
		Academic Credits: 20   Total Credits: 64		
64 Credits = Associate in Applied Science (AAS) Degree				