

# Earn & Learn

with Lake Region State College

## LRSC DUAL MODEL FOR SIMULATION TECHNOLOGY

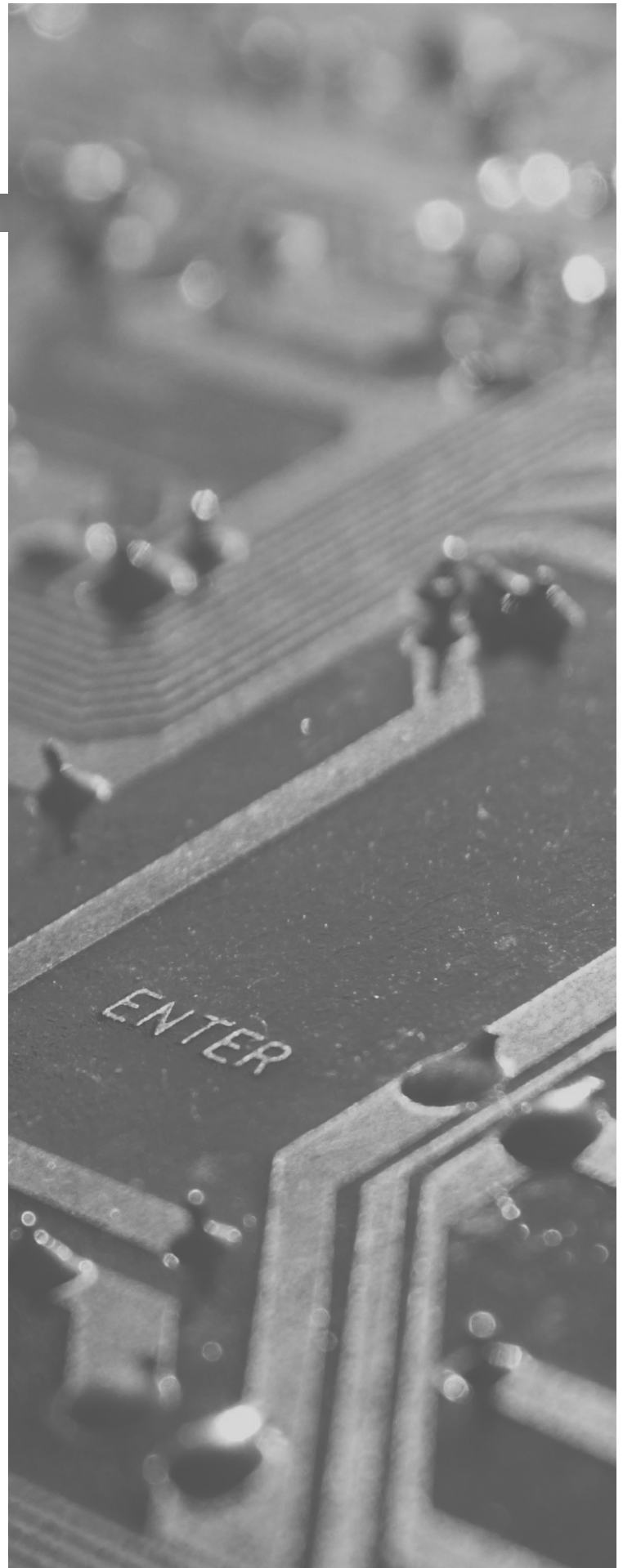
**Developed as another student option for Simulation Technology. Students will complete a federally-registered apprenticeship as an Electronics Engineering Technician 17-3023-01 while earning an Associate Applied Science (AAS) degree in Simulation Technology.**

Coursework is competency-based. It is possible to receive credit for academic achievement through testing, etc. For the Apprenticeship, the pre-apprenticeship course credits are suggested as follows:

- MATH 103 College Algebra - 3 credits
- ENGL 110 College Composition I - 3 credits
- HPER 210 First Aid - 2 credits
- AVIA 200 Ground School - 3 credits (Academic credit can only be given if Ground School is taken from an FAA certified school and the FAA written test is passed.)

**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 (65 credits = 975 classroom contact hours).



ACADEMIC AAS DEGREE: 2 YEARS	APPRENTICESHIP: 2.5 YEARS	WAGE LEVEL	HOURS
APPRENTICESHIP PRE-ENTRY			
	AVIA 200 Ground School** 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.
	MATH 103 College Algebra 3 cr		
	ENGL 110 College Composition I 3 cr		
	HPER 210 First Aid 2 cr		
Academic Credits: 0   Total Credits: 0	Academic Credits: 8   Total Credits: 8		
ACADEMIC 1 <sup>ST</sup> SEMESTER (FALL)			
AVIA 200 Ground School 3 cr	AVIA 201 1 cr	Employed with industry partner as apprentice.	Varies
AVIA Intro to Flight 1 cr	CIS 128 3 cr	A1 Employee	
CIS 128 Microcomputer Hardware I 3 cr	CIS 224 3 cr		
ELEC 100 DC Analysis/Lab 4 cr	ELEC 100 4 cr		
ENGL 110 College Composition I 3 cr	ELEC 272 3 cr		
MATH 103 College Algebra 3 cr			
Academic Credits: 17   Total Credits: 17	Academic Credits: 14   Total Credits: 22		
ACADEMIC 2 <sup>ND</sup> SEMESTER			
CIS 129 Microcomputer Hardware II 3 cr	AVIA 200 3 cr (if not obtained in during pre-apprenticeship)	Begin Apprenticeship	Varies
ELEC 101 AC Analysis/Lab 4 cr	CIS 129 3 cr	A2 Employee	
ENGL 120 College Composition II 3 cr or ENGL 125 Intro to Professional Writing 3 cr	ELEC 101 4 cr		
HPER 210 First Aid 2 cr	GenEd: Humanities/Social Science* 3 cr		
GenEd: Humanities/Social Science* 6 cr			
Academic Credits: 18   Total Credits: 35	Academic Credits: 13   Total Credits: 35		
SUMMER SEMESTER			
	ENGL 120 or 125 3 cr	A3 Employee	Varies
	GenEd: Humanities/Social Science* 3 cr		
Academic Credits: 0   Total Credits: 35	Academic Credits: 6   Total Credits: 41		
ACADEMIC 3 <sup>RD</sup> SEMESTER			
CIS 224 Networking I 3 cr	ELEC 281 4 cr		Varies
ELEC 272 Intro to Simulation 3 cr	ELEC 284 4 cr		
ELEC 281 Digital Integrated Circuits/Lab 4 cr	MATH 105 3 cr		
ELEC 284 Semiconductor Devices/Lab 4 cr			
MATH 105 Trigonometry 3 cr			
Academic Credits: 17   Total Credits: 52	Academic Credits: 11   Total Credits: 52		
ACADEMIC 4 <sup>TH</sup> SEMESTER			
CIS 220 Operating Systems-Unix 3 cr	CIS 220 3 cr	A4 Employee	Varies
ELEC 275 Visual Systems/Graphics 2 cr	ELEC 275 2 cr		
ELEC 282 Technical Simulation 3 cr	ELEC 281 4 cr		
ELEC 283 Simulator Systems 2 cr	ELEC 282 3 cr		
ELEC 285 Electronics Circuits 3 cr or COOP 196 3 cr	ELEC 283 2 cr		
	ELEC 285 3 cr		
Academic Credits: 13   Total Credits: 65	Academic Credits: 13   Total Credits: 65		
65 Credits = Associate in Applied Science (AAS) Degree			

\*Refer to the General Education Requirement (GER) matrix in the LRSC College Catalog for a list of eligible courses.

\*\*Academic credit can only be given if Ground School is taken from an FAA certified school and the FAA written test is passed.