

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

This degree provides students with classroom and laboratory experiences in electricity, mechanical power, pneumatics, hydraulics and ferrous and non-ferrous material. The Operations Emphasis focuses on those skills used in operational settings. Academic skills emphasizing related math, science and human relations are stressed to prepare students to meet the challenges common in the workplace.

STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Demonstrate the knowledge and ability to follow guidelines for safe operation and maintenance of various mechanical, electrical, and fluid power systems.
- Explain and show the skills to design and operate basic electrical, mechanical, and fluid power systems and to use computer-based programmable logic controller devices to monitor their operation and performance.
- Apply the skills and knowledge to various troubleshooting techniques for identification and correction of faults in electrical circuits and mechanical and high pressure fluid power systems.
- Utilize knowledge and skills in mathematics, written and oral communication, and teamwork.
- Demonstrate skills necessary for further education and managerial positions.

GENERAL EDUCATION REQUIREMENTS (27 Credits):

	CR	SEMESTER
COMMUNICATIONS: BUS 108, COM 101, 115	3	_____
ENGLISH: ENG 100, 101, 107, 113	3-5	_____
HUMAN RELATIONS: ALS 101, ANTH 101, 112, 201, 205, HIST 105, 106, 107, 150, 151, 210, 247, 260, HMS 130, 135B, 265B, MGT 100B, 283, PHIL 135, PSC 201, PSY 101, 102, 207, 208, 261, SOC	3	_____
MATHEMATICS: MATH 111B, 116, 124, 126, 127 or higher	3	_____
SCIENCE: EGG 131 and MT 102B or ET 131B	8	_____
FINE ARTS/HUMANITIES/ SOCIAL SCIENCES: AM, ANTH, ART, COM, ECON, ENG 223 or above, GEOG 106 or above, HIST, International Languages, Music, PHIL, PSC, PSY, SOC, THTR, WMST 113	3	_____
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	_____

SPECIAL PROGRAM REQUIREMENTS (33 Credits):

	CR	SEMESTER
AC 103B Introduction to HVAC Mechanical Theory and Application	5	_____
CONS 120B Printreading and Specifications	3	_____
IS 100B Core Computing Competency or IS 101 Introduction to Information Systems	0-3	_____
MT 104B Industrial Electricity	4	_____
MT 106B Mechanical Power Transmission	4	_____
MT 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation)	4	_____
MT 110B Material Science I (Ferrous and Non-Ferrous)	4	_____
MT 115B Programmable Logic Controllers I	3	_____
MT 116B Programmable Logic Controllers II	3	_____
With at least 3-4 credits from the following: Any course with ET or MT prefix	3-4	_____

ASSOCIATE OF APPLIED SCIENCE

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree. ETOPER-AAS

60
Total Credits

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.



Guided Pathway
Associate of Applied Science Degree
Engineering Technology – Operations Emphasis
Total Credits – 60 credits

First Semester	Requirement	Credit Hours	Term
Introduction to HVAC Mechanical Theory and Application	AC 103B	5	
Print Reading and Specifications	CONS 120B	3	
Science	MT 102B or ET 131B	4	
Mathematics	MATH 111B, 116, 124, 126, 127 or higher	3	
Prove Core Computer Competency	With either IS 100B (0 credit test) or IS 101 (3 credits)	0	
	TOTAL	15	
Second Semester	Requirement	Credit Hours	Term
Industrial Electricity	MT 104B	4	
Science	EGG 131	4	
Communications	Bus 108, COM 101, 115	3	
English	ENG 100, 101, 107, 113	3	
	TOTAL	14	
Summer Session	Requirement	Credit Hours	Term
U.S. & NV Constitutions	PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4	U.S. & NV Constitutions
	TOTAL	4	
Third Semester	Requirement	Credit Hours	Term
Mechanical Power Transmission	MT 106B	4	
Elective	Any course with ET or MT prefix	3	
Material Science I (Ferrous and Non-Ferrous)	MT 110B	4	
Programmable Logic Controllers I	MT 115B	3	
	TOTAL	14	
Fourth Semester	Requirement	Credit Hours	Term
Programmable Logic Controllers II	MT 116B	3	
Fluid Power (Pneumatics, Hydraulics, Instrumentation)	MT 108B	4	
Human Relations	Courses per Degree sheet.	3	
*Fine Arts/Humanities/Social Sciences	Courses per Degree sheet. <i>Recommended MUS 231</i>	3	
	TOTAL	13	
	Degree TOTAL	60	

*Fine Arts/Humanities/Social Sciences: MUS 231 Recording Techniques I recommended for all ET students.

More detailed information can be found on the ET Web page at <http://www.csn.edu/et>