

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

This degree prepares students for employment in Power production. This program integrates two hands-on Co-Op/Internships in Operation, Electricity, and Hydro/Electricity that provides students with a wide-range of experiences. This program is presented in cooperation with the U.S. Bureau of Reclamation. Academic skills emphasizing related math, science and human relations are stressed to prepare students to meet challenges common in the workplace.

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

- Identify the occupational positions available in the Power Utility and other power generating plants.
- Participate in an on-job training experience in a power generating plant or dam.
- Identify acceptable work performance standards.
- Develop positive attitudes towards work and service to others.
- Be prepared to accept management and/or supervisory positions in the Power Utility and other generating plants.

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 (34 Credits):

	CR	SEMESTER
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	_____

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	CR	SEMESTER
Plus 12 Credits from the following		
FOR ELECTRICAL MAINTENANCE:		
AC 102B Introduction to HVAC Electrical Theory and Application	5	_____
AC 103B Introduction to HVAC Mechanical Theory and Application	5	_____
BTE 116B Electrical Theory and Applications 1	3	_____
CADD 105 Intermediate Computer Aided Drafting	3-4	_____
ESH 207B Introduction to Safety Management	3	_____
ESH 240B Wastewater Treatment I	3	_____
ET 100B Survey of Electronics	3	_____
ET 104B Fabrication and Soldering Techniques	0.5-6	_____
ET 106B Test Equipment Operation	3	_____
MT 180B Co-Op/Internship First Semester	3	_____
MT 181B Co-Op/Internship Second Semester	3	_____
FOR MECHANICAL MAINTENANCE:		
CADD 105 Intermediate Computer Aided Drafting	3-4	_____
ESH 240B Wastewater Treatment I	3	_____
MT 180B Co-Op/Internship First Semester	3	_____
MT 181B Co-Op/Internship Second Semester	3	_____
WELD 130B Welding Support Equipment Operations	3	_____
WELD 132B Oxy/Fuel, Plasma and Carbon Arc-Air Cutting Operations	2	_____
WELD 133B SMAW (Stick)	4	_____
WELD 134B GTAW (Tig)	4	_____
FOR PLANT OPERATION:		
CADD 105 Intermediate Computer Aided Drafting	3-4	_____
EMA 101 Principles of Emergency Management	3	_____
EMA 102 Disaster Mitigation and Preparedness	3	_____
ESH 207B Introduction to Safety Management	3	_____
ET 100B Survey of Electronics	3	_____
ET 104B Fabrication and Soldering Techniques	0.5-6	_____
ET 106B Test Equipment Operation	3	_____
MT 180B Co-Op/Internship First Semester	3	_____
MT 181B Co-Op/Internship Second Semester	3	_____

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

ETPWR-AAS

61
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 – Power Utility Emphasis
Total Credits – 61 credits

First Semester	Requirement	Credit Hours	Term
Communications	BUS 108, COM 101, 115	3	
Science	MT 102B or ET 131B	4	
Concentration Elective	Electrical Maintenance Mechanical Maintenance Plant Operation	3	
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	13	
Second Semester	Requirement	Credit Hours	Term
English	ENG 100, 101, 107, 113	3	
Industrial Electricity	MT 104B	4	
Fluid Power (Pneumatics, Hydraulics, Instrumentation)	MT 108B	4	
Concentration Elective	Electrical Maintenance Mechanical Maintenance Plant Operation	3	
	TOTAL	14	
Summer Semester	Requirement	Credit Hours	Term
Human Relations	Courses per Degree Sheets	3	
U.S. & NV Constitutions	PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4	
	TOTAL	7	
Third Semester	Requirement	Credit Hours	Term
Science	EGG 131	4	
Mechanical Power Transmission	MT 106B	4	
Programmable Logic Controllers	MT 115B	3	
Concentration Elective	Electrical Maintenance Mechanical Maintenance Plant Operation	3	
	TOTAL	14	
Fourth Semester	Requirement	Credit Hours	Term
Material Science I (Ferrous and Non-Ferrous)	MT 110B	4	
Programmable Logic Controllers	MT 116B	3	
Concentration Elective	Electrical Maintenance Mechanical Maintenance Plant Operation	3	
*Fine Arts/Humanities/ Social Sciences	Courses per Degree Sheets <i>Recommended MUS 231</i>	3	
	TOTAL	13	
	Degree TOTAL	61	

*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>