ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Associate of Applied Science Degree in Engineering Technology - Telecommunications Emphasis prepares students with the necessary skills required by today's high-tech, high-wage telecommunications industry. Instruction includes; telecommunications and advanced telecommunications and advanced telecommunications topics; IP network installation, configuration, and maintenance; electronics and digital circuits; copper and fiber optic cabling installation.

This two-year program provides the students with the methods and procedures used by technicians in the telecommunications industry. Instruction takes place in a hands-on, state-of-the-art environment.

Educational Objectives - Within a few years of graduation: Graduates from CSN's Telecommunication Engineering Technology Program will demonstrate the ability to apply technical, managerial, design and application skills necessary to install, manage, operate, and maintain telecommunication systems. Graduates will have effective technical communication skills necessary to function on professional teams. Graduates are prepared to enter the working force with professional work ethic with the commitment to lifelong learning, quality and continuous improvement through the clear ability to assume increasing levels of responsibility in both industry and community.

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

- Construct, test, and verify the operation of voice and data cables, various analog, digital and microprocessor/microcontroller circuits, demonstrate a working knowledge of filter circuits, fiber optics, electronics/telecommunications laboratory test equipment.
- Perform IP network installation, maintenance, configuration, analysis, and management, while utilizing devices such as Routers and PCs.
- Explain the signaling and system structure of the various types of telephones, such as the mobile, IP based, and traditional. Distinguish between the various modulation and multiplexing techniques commonly employed in the telecommunication transmission systems.
- Demonstrate Commitment to quality, timeliness, and continuous improvement, while showing an understanding of the need for and an ability to engage in self-directed continuing professional development.
- Demonstrate positive work ethics and interpersonal skills in a group environment and to deliver written and oral reports on projects.

GENERAL EDUCATION REQUIREMENTS (27 Credits):

	CR	SEMESTER
COMMUNICATIONS: ENG 107	3	_____
ENGLISH: ENG 100, 101, 113	3-5	_____
HUMAN RELATIONS: ALS 101, ANTH 101, 112, 201, 205, HIST 105, 106, 107, 150, 151, 180, 210, 247, 260, HMS 130, 135B, 265B, MGT 100B, 283, PHIL 135, PSC 111, PSY 101, 102, 207, 208, 261, PT 122, SOC	3	_____
MATHEMATICS: MATH 111B	3	_____
SCIENCE: EGG 131, 132	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 (41 Credits):

		CR	SEMESTER
CSCO 105B	Fundamentals of Voice and Data Cabling	3	_____
CSCO 120	CCNA Internetworking Fundamentals	4	_____
CSCO 121	CCNA Routing Protocols and Concepts	4	_____
CSCO 205B	Fiber Optic Cabling	3	_____
EET 108B	Telecommunications and the Information Age	3	_____
ET 131B	DC for Electronics	4	_____
ET 132B	AC for Electronics	4	_____
ET 212B	Digital Logic I	4	_____
ET 282B	Microprocessors I	3	_____
ET 293B	Telecommunication Transmission Methods	3	_____
ET 294B	EET Capstone	3	_____
Plus 3 credits from the following:			
CIT 110	A+ Hardware	3	_____
ET 106B	Test Equipment Operation	3	_____
IS 115	Introduction to Programming	3	_____
CSCO 200 or higher		4	_____
ET 200 or higher		3-4	_____

68 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.