ENGINEERING TECHNOLOGY –
Slot and Self-Serve Device Technology Emphasis

PROGRAM DESCRIPTION
The degree provides students with the necessary skills to assist in the planning, design, troubleshooting, and maintenance of various devices such as ATMs, kiosks, slot machines and related devices. Instruction includes network management systems such as player tracking/slot management systems or ATM Network Monitoring systems. The appropriate regulations, such as slot machines, related gaming regulations or ATM related banking regulations will be covered in each concentration. Key common and specialized components and sub-assemblies of these devices will be covered. For example, some of these components and sub-assemblies are random number generators, opto-couplers, coin comparators, dollar bill acceptors, and printers. Computers and networks that use these devices and slot machine gaming are addressed. This two-year program provides the student with the repair methods and procedures used in the industries supported by each concentration. Instruction takes place in a hands-on state-of-the-art environment.

STUDENT LEARNING OUTCOMES
• Demonstrate a working knowledge of the theory of operation of typical self-serve devices such as electronic slot machines, ATMs, and/or Kiosks; Pseudo Random Number Generators; ROM, PROM, EPROM, EEPROM and RAM; and stepper motors.
• Describe the operation of typical peripheral devices; the external features; the money handling assemblies; the modes of operation in devices such as the slot machine, ATMs, and/or Kiosks.
• Identify electronic circuits and components used in these devices.
• Demonstrate positive work ethics and interpersonal skills in a group environment and to deliver written and oral project reports.
• Characterize and troubleshoot the installation and operation of networks that support devices such as slot machines and computers.
• Demonstrate a working knowledge of personal computers and the embedded computers found in slot machines.
• Show an ability to independently analyze, troubleshoot, repair, construct, and/or design slot machines or other self-service devices.

PLEASE NOTE
- The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (27 CREDITS)

MATHMATICS
ET 111B or MATH 127 or higher

ENGLISH COMPOSITION
ENG 100 or 101 or 113

COMMUNICATIONS
COM 115 or ENG 107

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 101 or above

NATURAL SCIENCE
EGG 131 and 131L, and ET 131B

FINE ARTS/HUMANITIES/SOCIAL SCIENCES
AM 145 or above; ANTH 101 or above, except for 102; ART 101 or above; COM 101 or above; ECON 100 or above; ENG 223 or above; GEOG 106 or above; HIST 101 or above; International Languages 101B or above; MUS 101 or above; PHIL 101 or above; PSC 101 or above; PSY 101 or above; SOC 101 or above; THTR 100 or above; WMST 113

U.S. AND NEVADA CONSTITUTIONS
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (36 CREDITS)

CORE REQUIREMENTS (21 credits)
CIT 110 A+ Hardware
CIT 112B Network+
CSCO 105B Fundamentals of Voice and Data Cabling
ET 132B AC for Electronics
ET 212B Digital Logic I
ET 238B Device Peripherals
ET 294B EET Capstone

Choose from the following (2-3 credits)
ET 100B Survey of Electronics
ET 104B Fabrication and Soldering Techniques

Choose one from the following (0-3 credits)
IS 100B Core Computing Competency
IS 101 Introduction to Information Systems

Choose from the following (4 credits)
ET 205B Power Supply Theory and Repair
ET 206B Video Monitor Theory and Repair
ET 289B Electrical Troubleshooting

SPECIALTY COURSES – 7-9 Credits
Choose one concentration
Slot Technology Technicians
CIT 263B Project Management
ET 138B Introduction to Slot Machine Technology
GAM 225 Introduction to Slot Machine Technology

Self-Service Device Technicians
ACC 135B Bookkeeping I
CSCO 120 CCNA Internetworking Fundamentals

NOTE
• Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement (only AA, AS, and AB degrees) which may be used to fulfill the corresponding general education or emphasis requirement.
• 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.