# Engineering Technology – Slot Repair

**CERTIFICATE OF ACHIEVEMENT (CA)**　　　　**REQUIRED CREDITS: 32**　　　　**DEGREE CODE: ETSLOT-CT**

## DESCRIPTION

Upon successful completion of this program, students will be prepared for an entry-level position in the gaming industry. This program integrates classroom experience with hands-on lab exercises and covers topics such as planning, design, troubleshooting and maintenance of various slot machines and related devices. Networks used to support modern slot machine gaming are also covered.

## STUDENT LEARNING OUTCOMES

- Develop a working knowledge of the theory of operation of a typical electronics slot machine; a working knowledge of Pseudo Random Number Generators; a working knowledge of ROM, PROM, EPROM, EEPROM and RAM; a working knowledge of stepper motors.
- Describe the operation of peripheral devices; the external features of a slot machine; the coin-in coin-out assemblies; the modes of operation of the electronics slot machine.
- Identify electronic circuits and components used in slot machines.
- Develop an understanding of the installation of physical network infrastructure that support devices such as slot machines and computers.

**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 (3 CREDITS)

### COMMUNICATIONS (3-5 credits)
Choices: COM 115 or ENG 100 or 101 or 107 or 113
Recommended: COM 115 Applied Communication

## SPECIAL PROGRAM REQUIREMENTS (29 CREDITS)

| | | |
|---|---|---|
| CSCO 105B | Fundamentals of Voice and Data Cabling | 3 |
| ET 104B | Fabrication and Soldering Techniques | 2 |
| ET 106B | Test Equipment Operation | 3 |
| ET 111B | Mathematics for Electronics Applications | 3 |
| ET 131B | DC for Electronics | 4 |
| ET 132B | AC for Electronics | 4 |
| ET 138B | Introduction to Slot Machine Technology | 3 |
| ET 212B | Digital Logic I | 4 |
| ET 238B | Device Peripherals | 3 |

Computation included in ET 111B

Human Relations included in CSCO 105B

## FULL-TIME STUDENT DEGREE PLAN

*Add more semesters to modify this plan to fit part-time student needs.*

| FIRST SEMESTER | Credits |
|---|---|
| ET 104B Fabrication and Soldering Techniques | 2 |
| ET 106B Test Equipment Operation | 3 |
| ET 131B DC for Electronics | 4 |
| ET 138B Introduction to Slot Machine Technology | 3 |
| *TOTAL CREDITS* | *12* |

| SECOND SEMESTER | Credits |
|---|---|
| COM 115 Applied Communication | 3 |
| ET 212B Digital Logic I | 4 |
| ET 111B Mathematics for Electronics Applications | 3 |
| *TOTAL CREDITS* | *10* |

| THIRD SEMESTER | Credits |
|---|---|
| CSCO 105B Fundamentals of Voice and Data Cabling | 3 |
| ET 132B AC for Electronics | 4 |
| ET 238B Device Peripherals | 3 |
| *TOTAL CREDITS* | *10* |

**DEGREE PLAN TOTAL CREDITS** ........................................**32**