

# ITSC 130: INTRUSION SYSTEMS

## Foothill College Course Outline of Record

Heading	Value
<b>Units:</b>	0.5
<b>Hours:</b>	8 lecture, 4 laboratory per quarter (12 total per quarter)
<b>Prerequisite:</b>	Completion of recognized sound and communication apprenticeship or equivalent and recent employment as an installer/technician in the sound and communication industry.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

## Description

Covers the applicable standards, preventing false alarms, components, wiring and installation of intrusion systems.

## Course Objectives

The student will be able to:

- Describe the purpose of an intrusion system and statistics associated with burglary
- Identify the components of an intrusion system
- Identify specifications for magnetic contacts
- Identify various different magnetic contacts and the applications they can be used for
- Describe the difference between a closed loop and an open loop configuration
- Identify various types of motion detectors

## Course Content

- Introduction (Lec)
  - What is an intrusion system?
  - Types of systems used today
- Applicable Standards (Lec)
  - NFPA 70
  - NFPA 72
  - NFPA 730
  - NFPA 731
- Fundamentals (Lec)
  - Protection strategies
  - Intrusion system monitoring
  - Detection/wiring configurations
  - False alarms
- Sensors and Input Devices (Lec)
  - Magnetic contact design
  - Types of magnetic contacts
  - Motion detectors
  - Glass break detectors

- Control Panels and Keypads (Lec)
  - Panel connections
  - Keypads
- Hands-on Intrusion Lab (Lab)
  - Build small scale intrusion system

## Lab Content

- Work individually and in teams with basic tools of the trade, test instruments and tool safety.
- Included will be the installation of sound and/or communication devices.
- Equipment safety and safe handling practices are reviewed and applied.

## Special Facilities and/or Equipment

- Intrusion cabling and equipment for hands-on lab.
- When taught via Foothill Global Access, on-going access to email software and hardware; email address.

## Method(s) of Evaluation

- Results of assessments
- Results of quizzes and tests
- Discussion participation

## Method(s) of Instruction

- Lecture
- Group discussion
- Demonstration
- Lab

## Representative Text(s) and Other Materials

Handouts and/or worksheets provided by course instructor.

## Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Reading assignments:

- Read Lesson 10: "False Alarms - What is and what isn't"
- Read Lesson 15 regarding Motion Detectors

B. Writing assignments:

- Describe why false alarms are a major issue with intrusion systems and include methods used to reduce them
- Explain the difference between a passive and an active motion detector. Include why and where you would use both types of motion detectors

## Discipline(s)

Telecommunication Technology