Program	Engineering
Specialization	Automatic control technology
Course Number	20310111
Course Title	Security and alarm systems
Credit Hours	2
Theoretical Hours	1
Practical Hours	3

Brief Course Description:

❖ This subject treats application related to security system in building, fire detection systems, local and central fire detection system, Fire detectors, installing, fire alarm system, monitoring and security system

Course Objectives:

❖ Identify the fire alarm and security system
❖ Explain the principle and function fire alarm system and security system
❖ To install the security and fire alarm system
❖ To make programming and setup of the fire alarm and security system
❖ To maintained the fire alarm and security system

Detailed Course Description

number	Unite name	Unite content	Time neded
1	**Extinguished system**	▪ Manual Extinguished system ▪ Automated Extinguished system	2weeks
2	**Fire alarm system**	▪ Basic consideration ▪ Controls ▪ Basic installation technology ▪ Selecting equipment ▪ Design of residential security/fire alarm system ▪ Design of commercial security /fire alarm system ▪ Reading electrical blueprints ▪ Trouble shooting	6 weeks
3	**Lights**	▪ Principe of light ▪ Transmission of light ▪ Lens	1week
4	**Security system**	▪ the components of the security system ▪ The function of security system ▪ The principle of security system ▪ Receiving audio and video signal ▪ Types of cables ▪ Schematics diagrams ▪ Design the security system ▪ troubleshooting	7 weeks
5	**Electria wiring practice**	▪ Wiring practices of fire alarm and security circuits ▪ Single-phase and three-phase outlets wiring and practices, with	2 weeks

		system wiring	
6	**Installation of Mechanica component of fire alarm system**	▪ pipes ▪ Pump ▪ Pressure tanks ▪ Gravity tanks of elevated tank ▪ Sprinkler head	1 weeks
7	**Fire alarms practice**	Software programming for control panel of fire alarm system ▪ Connecting the diction lines ▪ Connecting the dialer ▪ Connecting the fault signaling output ▪ Connecting the alarm signaling output ▪ Connecting the relay output ▪ Powering up the system	6 weeks
8	**Security system practice**	▪ Installation the security system ▪ Installation the camera ▪ Installation the sound ▪ Setup the software ▪ Program tools ▪ Network function ▪ Maintenance the security system	7 weeks

☐ **Evaluation Strategies:**

		Percentage	Date
1. Exams	First Exam	20%	--/--/----
	Second Exam	20%	--/--/----
	Assignments	10%	
	Final Exam	50%	--/--/----
2. Homework and Projects			
3.Discussions and lecture Presentations			

☐ **Teaching Methodology:**

1. Lecture

References:-

1-Fire Detection system   Dian Revotich,2008

2- GM Digital video Recorder, operating manual

3-GST, Intelligent Fire Alarm Control, installation and operation manuals

4-كود أنظمة مكافحة الحريق- الكود الاردني

5-كود الوقاية من الحريق- الكودة الاردنية