

# **BUILDING SERVICES SPPE 3112**

### INTRODUCTION TO BUILDING **SERVICES**

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### **OPENCOURSEWARE**



### Engineering services in a building

- Intended to provide an environment which is both healthy and comfortable, and which allow people to carry on their activities (whether work or pleasure) without physiological stress.
- Provide many jobs to the society.
- Combination between Civil Engineering, Mechanical Engineering and Electrical Engineering.
- Include service and exertion.



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### Building services are what makes a building come to life.

#### They include :-

- Energy supply gas, electricity and renewable sources.
- Heating and air conditioning.
- Water, drainage and plumbing.
- Sanitary appliances.
- Fuel characteristics and storage.
- Accommodation
- Natural and artificial lighting
- Escalators and lifts.
- Ventilation system and refrigeration.
- building accessibility
- Security system
- Fire protection.



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#### CATEGORIES OF ENGINEERING SERVICES

# Plant and equipment.

- Electrical distribution boards
- Air-conditioning plant
- Lift motor rooms
- Escalator motor

### Service runs

- Electrical distribution cable and wiring system to plant and to appliances
- Telephone cable and wiring system
- Air-conditioning ductwork
- •Specialist gas supplies (in hospitals)

## **Appliances**

- Light fitting
- Lifts
- Escalator
- Air-conditioning terminal







### There are some examples job in building services:-

### M & E Services Manager

- ☐ to obtain M & E Tenders for D & B Projects.
- ☐ deal with the supervision of site work to ensure Quality of work and the correct progress of sub-contractors.
- manage the M & E preferred subcontractors list and oversee work to ensure compliance with the specification and manage the successful commissioning of each project



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### There are some examples job in building services:-

### **Building Services Associate**

- Building Services Associate who is a motivated self starter and is fully aware of the Malaysia market to lead a team of Multi Disciplinary engineers.
- ☐ This position would ideally suit an ambitious senior engineer who is looking to progress and who is preferably chartered.
- Will also be commercially minded and have previous experience in the Building Services industry at a Senior level and you will be working on a wide portfolio of interesting and challenging projects which include Universities, NHS, Sports Clubs, Housing Associations and private commercial developers.



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### There are some examples job in building services:-

### **Building Services Design Manager**

Responsible for managing the production of work in terms of quality and output in the Design Department during the process You will lead the design meetings during the tender and construction phases and you will also be capable of dealing with design queries as and when required and review the design specifications for to provide value for money. You will have excellent inter-personal and negotiation skills with a good working knowledge of construction materials, methods and a good knowledge of building regulations and be computer lit.