

ENG308 HCIA - 5G

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

ENG308 HCIA – 5G introduces the evolution and typical industry applications of 5G, basic concepts of 5G, key technologies used in 5G, and successful cases of combining 5G with typical vertical industries, providing reference and guidance for related personnel to learn 5G knowledge. Through this course students can understand the 5G development and evolution, 5G protocol standardization progress, key technologies used in 5G, new 5G network architecture, and typical industry applications and solutions, providing support for subsequent work.

Topics:

- Wireless communication systems
- Introduction of 5G
- Driving Force of 5G evolution
- Development of 5G protocol standardization
- 5G Industry chain and ecosystem
- Global commercial development plan
- 5G Business value and development
- 5G Business applications and cases
- IoV solution
- Smart healthcare solution
- Smart education solution
- Smart grid solution

Learning Outcome:

- Examine digital systems and modulation schemes.
- Solve for system parameters using appropriate mathematical and statistical models.
- Appraise the function and performance of the various subsystems/blocks in communication systems.
- Calculate the design parameters to satisfy the given requirements for the communication system.
- Analyse the digital transmission of signals.
- Compare the different generations of communication systems.
- Rate the performance of communication systems.

Assessment Strategies (Evening Class):

| Components | Description | Weightage Allocation (%) |
|-------------------------------|-------------|--------------------------|
| Overall Examinable Components | Online Exam | 100 |

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|--------------|------------|
| Total | 100 |
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