Civil, Environmental and Geomatic Engineering

Engineering Study of Rail Systems and Infrastructure (CEGE0060)

Description

The course will focus on the asset and system engineering associated with typical UK rail networks and how they need to be integrated to provide a railway route and service capability. The student will explore and learn about the types of railway modes within the UK, the typical rail vehicles operated and the principal network rail systems together with the associated built rail environment that supports the required rail journeys. Using this learning, the students, working in groups, will further develop an appropriate engineering solution for a given business scenario. Further, on an individual student basis, the student will reflect and report on the knowledge they have individually gained and how they successfully applied to the Group Solution.

Aims and Learning Outcomes:

Through a structured given business scenario the student will gain a solid knowledge of the rail systems and infrastructure and their engineering that enable the operator to provide the rail journey and the network capability.

The student will obtain a fundamental knowledge of rail operations, rail systems and infrastructure that constitute a rail network and from this knowledge specifically apply it in order to provide a design/operational solution to satisfy the objects of the scenario.

The student will obtain a greater appreciation of the railway domain and its engineering and operational requirements. It should also enable the student to have significant rail orientation if seeking a future graduate career path within the industry.

By the end of the course, the students should be able to:
1. Evaluate rail vehicles, systems and associated built environment that support and operate the UK rail network.
2. Understand and classify the engineering options available to deliver a rail service that meets a given business scenario.
3. Analyse, develop and apply concepts for the operational

Key information

- Year: 2019/20
- Credit value: 15 (150 study hours)
- Delivery: PGT L7, Campus-based
- Reading List: View on UCL website
- Tutor: Mr Robert Hutchison
- Term: Term 1
- Timetable: View on UCL website

Assessment

Coursework: 50%
Coursework: 50%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
of rail systems
4. Formulate an integrated rail network system
Civil, Environmental and Geomatic Engineering

Engineering Study of Rail Systems and Infrastructure (CEGE0060)

Description

The course will focus on the asset and system engineering associated with typical UK rail networks and how they need to be integrated to provide a railway route and service capability. The student will explore and learn about the types of railway modes within the UK, the typical rail vehicles operated and the principal network rail systems together with the associated built rail environment that supports the required rail journeys. Using this learning, the students, working in groups, will further develop an appropriate engineering solution for a given business scenario. Further, on an individual student basis, the student will reflect and report on the knowledge they have individually gained and how they successfully applied to the Group Solution.

Aims and Learning Outcomes:

Through a structured given business scenario the student will gain a solid knowledge of the rail systems and infrastructure and their engineering that enable the operator to provide the rail journey and the network capability.

The student will obtain a fundamental knowledge of rail operations, rail systems and infrastructure that constitute a rail network and from this knowledge specifically apply it in order to provide a design/operational solution to satisfy the objects of the scenario.

The student will obtain a greater appreciation of the railway domain and its engineering and operational requirements. It should also enable the student to have significant rail orientation if seeking a future graduate career path within the industry.

By the end of the course, the students should be able to:
1. Evaluate rail vehicles, systems and associated built environment that support and operate the UK rail network.
2. Understand and classify the engineering options available to deliver a rail service that meets a given business scenario.
3. Analyse, develop and apply concepts for the operational

Key information

Year 2019/20
Credit value 15 (150 study hours)
Delivery UGM L7, Campus-based
Reading List View on UCL website
Tutor Mr Robert Hutchison
Term Term 1
Timetable View on UCL website

Assessment

Coursework: 50%
Coursework: 50%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
of rail systems
4. Formulate an integrated rail network system