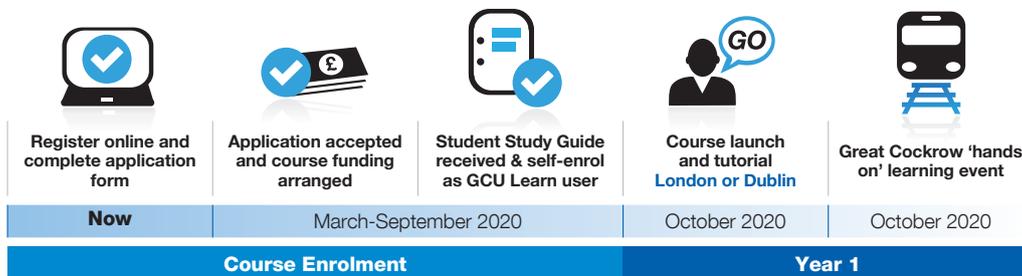# Bachelor of Science Degree in Railway Operations Management

This two-year course is ideal for anyone who has a Higher National Diploma, Diploma of Higher Education or equivalent work experience that can be considered instead through 'Recognition of Prior Learning'. You must also have several years' experience in the rail industry covering different aspects of railway operations.

This is a work-based learning course that we deliver with our academic partner, Glasgow Caledonian University. It is comprised of 5 modules which are delivered over 6 trimesters. Each module begins with a classroom-based tutorial. You are then assigned a personal tutor for each module who will support, guide and mentor you through the content.

| Register online and complete application form | Application accepted and course funding arranged | Student Study Guide received & self-enrol as GCU Learn user | Course launch and tutorial **London or Dublin** | Great Cockrow 'hands on' learning event |
|---|---|---|---|---|
| **Now** | March-September 2020 | | October 2020 | October 2020 |
| **Course Enrolment** | | | **Year 1** | |

| Jan 2021 | May 2021 | Jul 2021 | Oct 2021 | Dec 2021 | Feb 2022 | May 2022 | Jul 2022 | Sep 2022 |
|---|---|---|---|---|---|---|---|---|
| | | Tutorials VENUE **London or Dublin** | | | | | | Course completed! |
| **Year 1** | | | **Year 2** | | | | | |

Graduate from GCU
VENUE **Glasgow**

## Course details

### This course will help you to:

- Gain a better understanding of the industry that you work in
- Develop your reflective skills through academic assessment.
- Gain an academic qualification for the industry in which you work
- Utilise the experience and knowledge gained to enhance your leadership skills
- Propose how your organisation can continually improve and communicate how this can be achieved

### Entry requirements

'Recognition of Prior Learning' or any of the qualifications below:

- Diploma of Higher Education
- HND - Higher National Diploma
- Vocational Qualifications Level 5
- NVQ Level 4
- SVQ Level 4
- Irish Advanced Certificate

### Knowledge and experience

Your relevant experience may include:

- Train Planning
- Railway Operating Principles
- Customer Services
- Safety
- Managing people
- Railway Business Organisation

**Institution of Railway Operators**

GCU
Glasgow Caledonian University
University for the Common Good

# Bachelor of Science Degree in Railway Operations Management
## Course syllabus

## Module 1
### Applied Personal and Professional Development

This work-based learning module will focus on empowering work-based learners to apply key concepts of personal and professional development to self within the workplace. Applied professional practice will be a core component of the module, but this will be expanded to encompass grounding in the management of key organisational realities which impact on and have linkages to the development of self, including, but not limited to, organisational structure, culture, change and leadership. The module will link back to the development of meta skills including integrity, adaptability, and initiative.

#### Syllabus
- Applied reflective skills
- Foundations of Organisational Structure
- Organisational culture and implications for managers
- Foundations of managing organisational change
- Applied management skills: Leadership; stakeholder management, conflict, and negotiation.

## Module 2
### Delivering Integrated Business Objectives in the Rail Industry

This module bridges concepts of value and efficiency with planning provision by covering the financial and economic background to the rail industry, the nature of costs of a railway company and how these costs can change in different circumstances and over different timescales. The module will also consider the impact of operational planning, modified train plans and the creation and implementation of a timetable. This will enable you to understand the influences on the building of commercial models for the provision of rail services that prioritise the interest of passengers and taxpayers.

#### Syllabus
- Political and economic drivers behind railway operations
- Railway costs, for example, cost structure, fixed and variable costs, cost allocation.
- Revenue, forecasting and distribution.
- Public interest in railways
- Technical standards and interoperability.
- Major traffic flows in Europe and the major players
- The timetable and resource planning process
- Influences of train planning
- The constituent elements of a 'good plan'

## Module 3
### Maintaining Business Resilience Whilst Managing Change

This module seeks to enable you to use methods of investigation to prevent re-occurrence of issues and to use good planning methodology to minimise the risks and disruption at times of change. You will be introduced to the assessment of risks in time of change and how best to manage them: placing emphasis on the potential to increase profit and/or other benefits to the organisation and taking stakeholders with them on the journey.

#### Syllabus
- The business continuity lifecycle
- Assessing and Managing risk
- Normal and degraded modes of operation, failure, and incidents
- Main models of innovation
- Managerial strategies to introduce and maximise benefits of change
- Current elements of innovation in rail
- Planning for emergencies
- Interfaces with railway and other agencies
- Purpose of investigations
- Theories of causation
- Human factors- aspects of human behaviour and the operator as a sub system.
- Safety critical and non-safety critical staff and the concept of staff competence.
- Communications
- The public interest in railway

## Module 4
### Improving Service Delivery in Rail

In this module you will learn about the key elements of rail services for a variety of customers including examples from both freight and passenger markets. The module will introduce business process improvement practices contextualised for the railway operations environment and will use performance data and other customer feedback data sets to enable students to understand how to plan and implement changes and strategies to improve outcomes.

#### Syllabus
- Definitions, scope and context relating to heavy, Light rail and Metro systems
- Key elements and principles of a performance regime
- Measuring rail service performance- different measures, their philosophy and effectiveness
- Business Process Improvement principles theories and methods
- Safety requirements and efficiency requirements and their effect on customer service delivery
- Analysis of different sets of industry data on passenger and freight customer satisfaction
- Passenger and freight customer satisfaction data sets
- Accident and incident customer data sets
- The train planning- performance loop
- The contractual railway
- Implementation of change in rail service delivery

## Module 5
### Work based project: Improving Business Efficiency

This module integrates some of the knowledge and skills that you develop through the degree programme and apply it to an identified work based issue(s) to improve business efficiency. On completion of the project, you should be able to reflect on your performance in relation to managing the project and meeting the aim of your investigation.

#### Syllabus
- Experiential learning
- Reflective practice
- Writing a Project Proposal
- Researching and Literature Reviewing
- Gathering Primary data
- Negotiating project content
- Writing a project report
- Delivering a presentation.

## Ready to apply?
To find out more about the upcoming start date please contact a member of our Learning and Development team, email **learning@railwayoperators.co.uk** or call on **03333 440523 (ext. 203)**.