MSc in Urban Climate & Sustainability (MUrCS)

Erasmus Mundus Joint Master’s Degree (JMD)
Background

- An output of WP3: *Course Content Development* and WP5: *Quality Assurance* of the RESCUE Project
- Output D5.1 – Programme Proposal approved by the GCU in April 2014
- Output D5.2 – Programme Approval by GCU in October 2014
Philosophy

Vision

Development of an Erasmus Multilateral MSc that produces high calibre post-graduates equipped with skills and knowledge to assess and manage climate change in the urban environment
An integrated approach to adapt to and mitigate local and global climate change realities in a sustainable manner, by feeding three thematic strands (Science, Planning and Management) into a set of core urban focused modules intended for an international Master’s programme.
Objectives

- Establish critical understanding of the *complexity of urban sustainability* and the need for local action to combat this global issue
- Evaluate *competencies in sustainable and climate orientated planning and design* in existing and future urban settings
- Apply *principles of sustainability* in key specialist areas, like urban planning and architecture
- Develop critical intellectual and practical skills in the collection, analysis, interpretation of data related to *urban climate change and sustainability*
Objectives

- Understand the role of *strategic planning* in managing urban climate change
- Appreciate the need for *explicit and inclusive community engagement*
- Enhance interpersonal, communications and other *transferable skills* so that they are competent to operate in *senior positions* in both public sector and in industry
- Develop skills in *research methods and practice* to allow for advanced research in sustainability to be undertaken.
<table>
<thead>
<tr>
<th>Module Title</th>
<th>Responsible Partner</th>
<th>ECTS</th>
<th>STREAM 1: Planning</th>
<th>STREAM 2: Management</th>
<th>STREAM 3: Science</th>
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Total frame of possible ECTS (Core+Elective+Thesis) per Stream

185
192.5
172.5

*) UNIBO is acting as a mobility partner for additional courses. **) May be offered at UNIBO by our Associate Partner UdS.
Content of NEW modules

- Urban and interactive planning
  - Planning process
  - decision making
  - Foresight
  - urban regeneration

- Sustainable Cities
  - smart cities and, covering
  - Transport
  - Energy
  - waste management, etc.
Content . . .

- Climate Change in the Urban Environment:
  - Earth System / Climate Science, Climate Change;
  - Adaptation and mitigation aspects;
  - Ecosystem services

- Data Management for Urban Environment
  - Uncertainty / error analysis, understanding of models and their outputs;
  - Data interrogation techniques
Managing Change for Urban Sustainability

Policy development for delivering urban sustainability
- Foundation of policy agenda, Strategy development, role of foresight, visioning, back casting, scenarios development, community engagement, environmental economics)

Urban professionals as ‘agents of change’
- The role of sustainability champions and leaders
- Characteristics for leaders of urban sustainability

Change management for delivering urban sustainability
- Managing change as a process (change management, project management, risk management)
- Communicating, negotiation and influencing change
- Managing creativity and innovation within teams
- Environmental Management Systems and Assessment
Structure & Mobility

Core Module

**Urban Climate & Sustainability**
*Basic and General Issues*
Input from all partners

**Research Methods**

**POP1: Professional Orientation & Practice**

- **Stream 1 (LAMK staff)**
  - Planning 1

**POP2: Stream 2 (GCU staff)**

- Management 1

**POP3: Stream 3 (UNIBO/UdS staff)**

- Science 1

Thematic Modules / Specialisation 1–2

- **Stream 1 (LAMK)**
  - Planning 2
- **Stream 2 (GCU)**
  - Management 2
- **Stream 3 (UNIBO/UdS)**
  - Science 2

Cross-Thematic MSc Theses &

- Planning & Management
- Science & Planning
- Management & Science

Presentation Seminars

**SEMESTER 1**

- **Compulsory student Mobility**
  - Mobile staff – All students together
  - Every intake year; UK

**SEMESTER 2**

- **Optional student Mobility**
  - Mobile staff – All students together
  - Alternating years; Finland/Italy

**SEMESTER 3**

- **Optional student Mobility**
  - Mobile students – 1/3 to each HEI
  - Preference: Stream-leader’s HEI

**SEMESTER 4**

- **Optional student Mobility**
  - Individual choice of study place
  - Preference: Supervisor’s HEI

**11 ECTS**
Structure & Mobility

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<td>SPEC-1 LAMK All students</td>
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Next Steps

- Incorporate lessons from the RESCUE Pilot Course into the proposal
- Seek Erasmus+ funding to offer the MSc as a ‘Joint Masters Degree’ between GCU/LAMK/UNIBO/UdS;
- If successful, run MUrCS in Sept 2016!
Thank you

Questions/Comments
Rohinton.Emmanuel@gcu.ac.uk