

CIV507 Integrated Water Resource Management

Faculty of CIVIL AND ENVIRONMENT ENGINEERING – Elective course

Credit: 3 ECTS: 10



Course Description: Integrated Water Resource Management naturally aligns with sustainability principles, particularly in the context of responsible water use, conservation, and governance. This course aims to provide students with comprehensive knowledge of Integrated Water Resource Management (IWRM), focusing on the efficient use of water resources while addressing environmental, socio-economic, and legal factors. Through this, the course promotes sustainable water management practices, including conservation, reuse, and balancing human needs with ecosystem preservation. These concepts directly contribute to civil and environmental engineering sustainability by fostering solutions that ensure long-term water availability and quality for future generations. The course outcomes emphasise sustainability in water management, offering students the skills and understanding necessary to implement sustainable practices in their professional lives.

Course Outcomes:

- Ability to select and apply appropriate Integrated Water Resources Management research methodologies.
- Understanding the environmental, socio-economic, legal, and political constraints in water resource systems.
- By the end of this course, you will have the proficiency to design and construct sustainable water management systems, equipping you with practical skills for your future career in civil and environmental engineering.
- Competence in using modern tools and techniques for water resource planning and management.
- Ability to evaluate the global, economic, environmental, and societal impacts of water-related issues.