

Semester:	6				
Course Code:	ME3070				
Course Name:	Introduction to Research Methods				
Credits Value:	1 (Notional hours: 50)				
Pre-requisites:	None				
Core/ Optional:	Core				
Hourly Breakdown	Lectures (hours)	Tutorials (hours)	Practical classes (hours)	Assignments (hours)	Independent Learning & Assessment (hours)
	04			22	24

Course Aim: To provide the participants the opportunity to experience the basic fundamentals of research methods. At the end of the course all students are expected to adopt a systematic approach in a research-based project.

Intended Learning Outcomes:

On successful completion of the course, the students should be able to;

- **differentiate** between an ad hoc and a research-based approach to solving a problem and identify the basic aspects involved in a research based approach
- **justify** the necessity for systematic validation using suitable methods
- clearly and systematically **communicate** the research
- **justify** the importance of honesty and integrity

Course Content:

- Introduction to the notion of research: The scientific method, Types of research.
- Defining a research question
- Literature Review
- Designing and undertaking ‘experiments’
- Validation: Types of validation, Analyzing research data
- Research communications: Written reports and Verbal Presentations
- Research ethics

Teaching/ Learning Methods:

Classroom lectures, and in-class exercises and assignments			
Assessment Strategy:			
Continuous Assessment 100%		Final Assessment 0%	
Details:		Theory (%)	Practical (%)
Written Assignments/Quizzes		55%	Other (%) (Project)
Verbal presentation		45%	
Recommended Reading:			
<ul style="list-style-type: none"> ➤ Nicholas Walliman (2011), <i>Research Methods: The Basics</i>, Taylor & Francis, Free e-Book available at: https://edisciplinas.usp.br ➤ Zina O'Leary (2014), <i>The Essential Guide to Doing Research</i>, Sage Publications, : http://eunacal.org/metodakerkimi/wpcontent/uploads/spss/The_essential_guide_to_doing_research.pdf 			