

IS8002: FOUNDATIONS OF INFORMATION SYSTEMS RESEARCH

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Foundations of Information Systems Research

Subject Code

IS - Information Systems

Course Number

8002

Academic Unit

Information Systems (IS)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

R8 - Research Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course covers the foundations of Information Systems research covering an overview of the discipline, introducing basics of research, and reviewing emerging research topics.

On completing the course, students should be able to:

- Appreciate how the Information Systems discipline has evolved, and the current state of the discipline
- Acquire basic research skills (e.g., identify literature gaps, conduct literature review, write critical reviews, and select appropriate research methods)
- Review and evaluate research papers in the discipline
- Understand the journal review process in the discipline and how to publish in high quality journals of the discipline
- Identify different types of research topics and methodologies in the discipline
- Demonstrate critical understanding of the literature specific to their chosen area of research and identify research gaps from selected the selected area
- Show familiarity with the central aspects of the area of research within which they propose to undertake their PhD study.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Acquire basic skills in conducting research in the discipline of Information Systems	30		x	
2	Demonstrate abilities to evaluate papers in the discipline of Information Systems	20	x		
3	Demonstrate critical thinking and analytical ability in evaluating critical literature specific to their chosen area of research, leading to the development of a research proposal.	50	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Class Discussions	- Literature review: Students will conduct literature review on a selected topic and present their findings in groups. Instructor and students will discuss trends and development of the selected topic over time. - In-class discussion: Instructors and students will have interactive discussion on selected papers to understand current trends in Information Systems research - Debate: Students will debate on a selected topic related to Information Systems research in class - Critical reviews: Students will evaluate selected papers related to Information Systems and brainstorm possible new research topics	1, 2, 3	3 hours per week.

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	AT1: Group Assignments Students have to form a group, read selected research papers, summarize and provide critiques on the papers, conduct literature research on selected topics, propose debate topics and convene debates in class, and summarize insights learnt from class discussions.	1, 2, 3	50	Final scores will be adjusted based on individual contributions to a group.	No

2	AT2: Literature Review for Research Proposal Each student has to prepare a report proposing and motivating a research topic, a review of literature (including existing research and relevant theories) pertinent to their proposed research topic, leading to the development of a research proposal specific to their chosen area of research. They are required to motivate a research topic, read the relevant literature, and provide a written critique in the form of a literature analysis that demonstrates their critical thinking and analytical ability in evaluating the literature specific to his/her chosen area of research. He/she has to present the proposal in class and handle criticisms from the peers.	1, 2, 3	30	-	No
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3	AT3: Individual Short Exercises Short exercises are conducted in class and take-home assignments. Students have to answer short questions related to class topics, research on the topics, and organize their answers in a formal report.	1, 2	10	-	No
4	AT4: In-Class Discussion and Participation Each student should participate in class discussions, read selected papers, share their viewpoints on selected class topics, and discuss with the peers in class.	1, 2, 3	10	Note that attendance is not participation. The activity is evaluated based on the quality of contributions in the discussions.	Yes

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

50

Assessment Rubrics (AR)**Assessment Task**

Group Assignments (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

[CILOs 1-3] - Capability to conduct literature review based on selected topics - Ability to summarize and present research findings in an orderly manner - Propose appropriate debate/discussion topics based on selected papers and convene the debates/discussions in an orderly manner - Ability to effectively describe and evaluate assigned papers, and propose possible topics for future extension - Summarize and highlight important learning insights derived from class debates/discussions

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Research Proposal (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

[CILOs 1] - Capability to effectively analyse and critique the literature specific to the student's chosen area of research - Ability to highlight important research gaps after literature review - Propose a new research topic after identifying research gaps and suggest appropriate research methods related to the topic

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Individual Short Exercise (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

[CILOs 1,2] - Capability to conduct literature search to answer in the short exercise. - Ability to demonstrate a good understanding of Information Systems literature, and good critical thinking and analytical ability in evaluating the literature. - Capability to summarize related information in an orderly manner

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

In-Class Discussion and Participation (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

[CILOs 1-3] - Be proactive and interactive in class discussion - Capability to brainstorm new research ideas on selected topics - Ability to demonstrate critical thinking and evaluate opinions of peers in class discussions

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Group Assignments (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

[CILOs 1-3] - Capability to conduct literature review based on selected topics - Ability to summarize and present research findings in an orderly manner - Propose appropriate debate/discussion topics based on selected papers and convene the debates/discussions in an orderly manner - Ability to effectively describe and evaluate assigned papers, and propose possible topics for future extension - Summarize and highlight important learning insights derived from class debates/discussions

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Assessment Task

Research Proposal (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

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Criterion

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Failure

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Part III Other Information

Keyword Syllabus

Epistemology, positivism, interpretivism, literature review, critical reviews, methodology, quantitative research, qualitative research, triangulation of research methods, theories, information systems, IT artefacts, history of information systems, design science, behavioural research, economics, analytical modelling, econometrics, explanatory and predictive models, human computer interaction (HCI), strategic information systems, research contributions, IS identity crisis, IT productivity paradox, IS business value, and IT nomological net

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Seminar specific readings list will be provided in the course.