

Research is a process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information, in accordance with suitable methodologies set by specific professional fields and academic disciplines.

Research is the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Research is defined as the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes.

COGNITIVE SKILLS المهارات المعرفية

- Students embarking on a research project are expected to have gained sufficient knowledge in their field of study.
- They are also expected to be able to work independently on a research project related to their field, that is, to plan and manage their time, conduct the research, write and present their findings.
- Cognitive skills required for research are very broad-based and encompass skills ranging from searching for information to a specialized analysis of a particular research problem.

المهارات المعرفية المطلوبة للبحث واسعة النطاق للغاية وتشمل مهارات تتراوح من البحث عن المعلومات إلى التحليل المتخصص لمشكلة بحث معينة.

- The cognitive skills involved in an undergraduate or postgraduate research project are at much higher levels than those required for taking courses. The different levels of cognitive skills required for courses and research projects can be shown using Bloom's revised taxonomy of learning domains in Table 1.1 (تصنيف بلوم المنقح لمجالات التعلم). The cognitive skills required for research projects are addressed in the three parts of this course: **Planning, Writing and Presenting**.

Table 1.1 Bloom’s revised taxonomy of learning domains

Definitions	Bloom’s definitions	Basic courses	Intermediate courses	Advanced courses	Undergraduate project	Postgraduate project
Knowledge	Remember previously learned information	■	■	■	■	■
Comprehension	Demonstrate an understanding of the facts	■	■	■	■	■
Application	Apply knowledge to actual situations	■	■	■	■	■
Analysis	Break down objects or ideas into simpler parts and find evidence to support generalisations	■	■	■	■	■
Synthesis	Compile component ideas into a new whole or propose alternative solutions	■	■	■	■	■
Evaluation	Make and defend judgments based on internal evidence or external criteria	■	■	■	■	■

ROLE OF SUPERVISOR

While carrying out the research project, the student will be working under a Supervisor* whose role is to advise the student on the technical content of the research project and to assess the performance of the student. **The role of the supervisor is more of a mentor and less of a teacher.** The supervisor does not teach but guides the student in the research project. Therefore, it important for you as a supervisee to discuss your ideas and progress with your supervisor on a regular basis. The supervisor will then be able to help you to refine your ideas as well as suggest solutions when you encounter problems.

Supervisor/advisor: Both terms refer to a faculty member who guides a student in a research project. ‘Supervisor’ is more commonly used in the United Kingdom whereas ‘advisor’ is more commonly used in the United States.

What is a research Question?

A research question is a question that a study or research project aims to answer. This question often addresses an issue or a problem, which, through analysis and interpretation of data, is answered in the study's conclusion. In most studies, the research question is written so that it outlines various aspects of the study, including variables to be studied and the problem the study addresses.

What is a research proposal?

A research proposal is simply a structured, formal document that explains what you plan to research (i.e. your research topic), why it's worth researching (i.e. your justification), and how you plan to investigate it (i.e. your practical approach).