SUBJECT DATASHEET

INTRODUCTION TO RESEARCH METHODOLOGY

BMEGT51XX24237-58

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
INTRODUCTION TO RESEARCH METHODOLOGY

ID (subject code)   BMEGT51XX24237-58

Type of subject
contact hour

Course types and lessons

Type	Lessons
Lecture	0
Practice	8
Laboratory	0

Type of assessment
term grade

Number of credits
5

Subject Coordinator

Name	Position	Contact details
Bükki Eszter	assistant professor	bukki.eszter@gtk.bme.hu

Educational organisational unit for the subject
Department of Technical Education

Subject website
https://edu.gtk.bme.hu

Language of the subject
magyar - HU

Curricular role of the subject, recommended number of terms
Direct prerequisites

Strong	Nincs
Weak	Nincs
Parallel	Nincs
Exclusion	Nincs

Validity of the Subject Description

Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580466/11/2025 registration number. Valid from: 2025.06.25.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The student will learn about the main types, characteristics and methods of research in the field of pedagogy and will be prepared to design and conduct practice-oriented pedagogical research in a professional and ethical manner. They will also acquire knowledge of the main strategies and sources for searching for literature, both Hungarian and foreign, and will learn how to analyse the literature and use proper references. Completion of the subject will provide useful support for writing a thesis and for studying issues and problems that later arise in pedagogical practice.

Academic results

Knowledge

1. Knows the main types and characteristics of pedagogical research.
2. Understands the steps of research, the content of the research plan.
3. Understands the methods of literature review.
4. Knows the main quantitative and qualitative methods of data collection and data analysis in educational research.

Skills

1. Is able to design a pedagogical practice-oriented research project, including the definition of the research problem, research questions and methods.
2. Effectively collects and analyses national and international literature related to a specific research problem.
3. Is able to construct questionnaires and perform simple descriptive statistical analyses of quantitative data.
4. Is able to design and thematically analyse individual interviews.

Attitude

1. Understands the importance of respecting research ethics.
2. Strives to achieve accurate, reliable and verifiable scientific results in all research activities.
3. Is open and receptive to new developments in education and training.

Independence and responsibility

1. Takes ownership and responsibility for all stages of the research process.
2. Independently applies the knowledge and research experience acquired to analyse and solve questions and problems arising in pedagogical practice.
3. Responsibly manages the rights and interests of research participants.

Teaching methodology

Lecture, class assignments

Materials supporting learning

- BME Műszaki Pedagógia Tanszék jegyzet.
- Csíkos, Cs. (2020). A neveléstudomány kutatásmódszertanának alapjai. ELTE Eötvös Kiadó.
- Falus, I. (szerk.) (2011). Bevezetés a pedagógiai kutatás módszereibe. Műszaki Könyvkiadó, Budapest https://docplayer.hu/5665571-Bevezetes-a-pedagogiai-kutatas-modszereibe.html
- Szokolszky, Á. (2020). A pszichológiai kutatás módszertana. Budapest, Osiris Kiadó.
- Sántha, K. (2022). Kvalitatív tartalomelemzés. ELTE Eötvös Kiadó.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules
The assessment of the learning outcomes set out in 2.2 is based on the completion of class assignments and an online test.

Performance assessment methods
A detailed description of the performance assessments carried out during the term: 1. Completing the class assignments. 2. Completing an online test.

Percentage of performance assessments, conducted during the study period, within the rating
- **Órai feladatok elvégzése**: 30
- **Online teszt kitöltése**: 70

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	91
Very good	87–90%
Good	75–86%
Satisfactory	62–74%
Pass	50–61%
Fail	50% alatt

Retake and late completion
Performance assessments may be made up in accordance with the provisions of the current Study and Examination Regulations, subject to payment of any fees provided for in the Fees and Benefits Regulations.

Coursework required for the completion of the subject

részvétel a kontakt tanórákon	8
felkészülés az online tesztre	100
online teszt kitöltése	2
egyéb felkészülés	40
összesen	150

Approval and validity of subject requirements
Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 02.06.2025.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

n order to achieve the learning outcomes set out in 2.2, the subject consists of the following thematic blocks. These will normally be 1 hour, but the proportion may vary from semester to semester depending on the composition of the students and the nature of the problems they propose to address. These thematic elements are scheduled in the syllabuses of the courses announced in each semester according to the calendar and other constraints.

1. Characteristics of pedagogical research, research paradigms and strategies, research ethics
2. Research design, components of a research plan
3. Searching for and analysing the literature
4. Quantitative data collection methods
5. Quantitative data analysis methods
6. Qualitative data collection methods
7. Qualitative data analysis methods
8. The thesis as a publication genre, references

Additional lecturers

Tóth Péter	egyetemi tanár / university professor	toth.peter@gtk.bme.hu
Berzsenyi Emese	adjunktus / assistant professor	berzsenyi.emese@gtk.bme.hu
Anafinova Saule	adjunktus / assistant professor	saule.anafinova@edu.bme.hu

Approval and validity of subject requirements