



University of Pretoria Yearbook 2021

BEdHons Computer-integrated Education (09240051)

Department Science, Mathematics and Technology Education

Minimum duration of study 1 year

Total credits 128

NQF level 08

Admission requirements

1. Relevant bachelor's degree and a relevant Teacher's Diploma (e.g. BA + HED) **or** relevant bachelor's degree and a Postgraduate Certificate in Education **or** relevant four-year bachelor's degree in Education (e.g. BEd) **or** relevant M+4 Teacher's Diploma and relevant Advanced Diploma in Education.

Additional requirements

Selection is based on:

- Meeting the minimum academic requirements required for admission;
- Previous academic performance;
- Applicable academic and/or teaching background;
- Availability of supervision for the required research project;
- Proven academic potential which may include academic communication and computer application skills;
- Additionally, an interview may be requested;
- The requirements of professional registration bodies;
- The discretion of the head of department.

Examinations and pass requirements

Subject to exceptions approved by the Dean, on the recommendation of the relevant head of department, a student may not sit for an examination for the honours degree more than twice in the same module.

A final-year student who has failed a maximum of three semester modules or their equivalent, with a final mark of at least 40% in each, may be admitted by the Dean to a special examination/s in these modules during January of the following year, provided that this will enable the student to comply with all the requirements for the degree.

Research information

A research project is compulsory and must be handed in for examination, as prescribed by the



particular department.

Pass with distinction

The degree is conferred with distinction on a student who has obtained an average of at least 75%, with a minimum of 70% in each module.



Curriculum: Final year

Minimum credits: 128

Fundamental modules

Part 2: Research report 780 (CIE 780)

Module credits 16.00

NQF Level 08

Prerequisites NMQ 755

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Semester 2

Module content

Supervised research project of limited scope. Use of qualitative and/or qualitative and or quantitative methods. Writing a short report.

Part 1: Research proposal 755 (NMQ 755)

Module credits 16.00

NQF Level 08

Language of tuition Module is presented in English

Department Humanities Education

Period of presentation Semester 1

Module content

Guided literature research, formulation of a conceptual framework and development of a research proposal for a supervised research project of limited scope.

Core modules

Assessment approaches and instruments 711 (API 711)

Module credits 16.00

NQF Level 08

Prerequisites No prerequisites.

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Semester 2



Module content

Foundations, principles and ethics of assessment practices. International trends. Quantitative and qualitative modes of assessment and appropriate instruments. Generating evidence for assessment. Assessment and quality assurance. Techniques of computer-based assessment.

Curriculum development 710 (CDD 710)

Module credits 16.00

NQF Level 08

Prerequisites No prerequisites.

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Semester 1 or Semester 2

Module content

Principles and foundations of curriculum/programme design and development. International and national models and trends in curriculum/programme development. Principles of outcomes-based programming in the SAQA context. Curriculum development models and instruments in action. Situation and task analysis needs assessment. Development. Dissemination. Implementation as a change process. Assessment and evaluation.

Computers as cognitive tools 720 (CIT 720)

Module credits 16.00

NQF Level 08

Prerequisites No prerequisites.

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Quarter 3

Module content

The purpose of this module is to enable the candidate to master computer-integrated techniques pertaining to cognitive tools.

Instructional tools and e-learning 710 (CTM 710)

Module credits 16.00

NQF Level 08

Prerequisites No prerequisites.

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Semester 1



Module content

The purpose of this module is to enable the candidate to master computer-integrated techniques pertaining to instructional tools and multimedia in education and training.

Philosophy and social imperatives of education 711 (EDS 711)

Module credits 16.00

NQF Level 08

Prerequisites No prerequisites.

Language of tuition Module is presented in English

Department Educational Psychology

Period of presentation Semester 1

Module content

Meta-theories in education. Empiricism; rational empiricism; critical rationalism; critical theory; phenomenology; hermeneutics; system theory; philosophies in education: traditional philosophies; indigenous (African) philosophies. The influence of modernism and postmodernism on education. Sociological imperatives for education. Theories of societal change and roles and values of education. Comparative perspectives on learning theories and their meaning for education.

Educational research methodology 745 (NMQ 745)

Module credits 16.00

NQF Level 08

Language of tuition Module is presented in English

Department Science Mathematics and Technology Education

Period of presentation Semester 1

Module content

The nature of educational enquiry: contexts of research, research ethics, truth, rationality, subjectivity and objectivity; Quantitative and qualitative modes of enquiry, research designs and data collection techniques. Various approaches to qualitative research including case study research, historical research, ethnographic research, and action research. Basic concepts and principles of quantitative research. Statistical techniques in the educational research process. Survey methodology and questionnaire design. Classification and graphical representation of data. Descriptive measures. Statistical inference. Data-processing procedures. Parametric versus non-parametric tests. Some test statistics (e.g. F-Test and T-test). Formulating a research methodology for a limited project.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.