

INSTITUT SUPERIEUR DE TECHNOLOGIES

Sarl au capital de 10 000 000

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Agréé par le FAFPA (ministère de l'emploi)

Diplômes reconnus par le CAMES

Vingt (20) ans au service de la formation des ressources humaines

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MASTER OF ENGINEERING IN ELECTRONICS AND TELECOMMUNICATION

1. TITLE OF PROGRAMME

The programme shall be master of engineering in electronics and telecommunication **MEng. (ET)**

2 PREAMBLE

2.1 Background

Most careers in the electronics engineering field feature a growth rate as fast as the average for the Burkina. with electronic engineering positions. In an electronics and Telecommunication engineering program, students will hone in on their engineering skills and decide which discipline of electronics they would like to focus their work in. Ideally, students in the major should have an engineering background from any discipline, but be willing to learn the unique facets of the electronics engineering area. Students can explore opportunities to connect with their classmates and instructors to build lasting relationships. Post-graduate career opportunities could arise from the connections students make during their graduate program. Additionally, they can continue to build upon their networking skills in professional organizations once they graduate, allowing them to learn of new opportunities.

2.2 Justification

Electronic engineers possess highly sought-after skills and the knowledge needed to deliver innovative solutions. They design and construct products and services we use each and every day—from smart devices to medical imagery, information systems to security and defence technologies.

2.3 Target Group

The targeted group includes holders of:

Applicants must have completed a UTS recognized bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate studies. Bachelor's in Engineering and other related Science and Technology fields. It is a requirement that the bachelor's degree be in engineering or the natural and

physical sciences, with no more than 25 per cent of subjects failed. Electronics engineering covers a broad range of electronics-based topics, including biomedical engineering and broadcasting and sound. Depending on their specific niche, professionals in the field can work almost anywhere and in a variety of departments. Professionals all need to have strong analytical skills and be experienced with identifying and solving complex problems within an organization. They will often need to perform detailed calculations in their roles and will be asked to train other employees.

3. Programme Objectives

3.1. General Objectives

As part of this course you will study courses that go beyond the theory of recent engineering developments.

Areas of study include:

- electronic circuit design
- integrated circuit design and fabrication
- embedded electronics
- electronics control systems
- computer systems electronics
- microelectromechanical systems (MEMS)
- micro/nanoscale device design and fabrication
- sensors and actuators

3.2. Specific Objectives

Our Master of Engineering (Electronic and Telecommunication) comprises a foundation year and an advanced studies year. You will:

- study the principles of control and communication systems
- build communication and project management skills
- gain advanced understandings in mathematics and systems engineering
- pursue specialist topics—from telecommunications and microelectronics to image sensors and processing
- undertake a significant research project

Duration of the Programme:

This course is offered on a Two-year (Four semesters), full-time or online basis for students with a UTS-recognized bachelor's degree in engineering or the natural and physical sciences.

Programme Structure

Courses codes	Courses Names	Credit Units
	Year one	
	Semester one	
RM M01	Advanced research methods	3
OB M03	Organization Behavior	3
CS M02	Communication Skills	3
ESD M04	Entrepreneurship and Development	3
MBEC 2632	Business Ethics and Corporate Governance	3
MSM 9450	Strategic Management	3
MAE 421	Academic Essay	3
MEET100	Broadband Multimedia Networks	3
MEET111	Circuit Analysis	3
	Semester Two	
MEET120	Communications & Computer Networks	3
MEET121	Image Processing	3
MEET122	Integrated Circuit Testing	3
MEET123	Nano electronic Devices	3
MEET124	Network Modeling & Performance	3
MEET125	Optical Communications	3
MEET126	Random Process	3
MEET127	Advanced Communication Electronics	3
MEET128	Advanced Digital Communication	3
MEET129	Advanced Digital signal process	3
		60
	Year Two	
	Semester One	
MEET 416	Advanced Digital Systems	7
MEET 417	Advanced Microprocessor Systems	8
MEET 418	Construction Contract Management and Law	7
MEET220	Wireless Communication Systems	8
		60
	Semester Two	
MEET 429	Internship	10
MEET 430	Thesis	20
		60
GCU		120