

# INFORMATION TECHNOLOGY - MASTER OF INFORMATION TECHNOLOGY (ONLINE)

The objective of this program is to provide opportunities for working professionals and traditional technology students to increase their knowledge and skillsets in the growing field of Information Technology. The professional Masters of Information Technology (M-IT) degree is a non-thesis, 100% online, professional development degree offered by the Department of Engineering Technology and Surveying Engineering (ETSE) in the NMSU College of Engineering. This degree is designed for working IT professionals and students interested in pursuing an advanced technology degree. Topics include system architecture, computer networking, development and application of software tools, cybersecurity, and virtual systems in the context of enterprise IT decision-making.

There are two paths to completing this degree. The first is a traditional program of 30 credits of masters' level course work for students who currently hold a baccalaureate degree. The second is a baccalaureate to master's accelerated track. In this track, undergraduates will successfully complete the first three years of an undergraduate baccalaureate program, which coincides with the requirements of the Engineering Technology BS degree in Information Engineering Technology (IET) or the BICT degree in Information and Communication Technology (ICT).

The accelerated track master's degree in engineering is not available to students who have already earned an undergraduate degree. Upon approval from the Graduate School, in the final year, up to 12 credits of IET/ICT degree's required or elective courses numbered 450 and above may be considered "dual credits" applying to both the baccalaureate and the M-IT degree. When the student completes the baccalaureate degree and after admission to the M-IT program, the completed dual credit courses will be applied to the Master's requirements. The final M-IT degree requirements will be chosen to complete the 30 credit requirement. Students will begin taking graduate-level classes when they have junior or senior standing (up to 9 credits). These courses double count, fulfilling requirements for both a baccalaureate and the M-IT degree.

Prefix	Title	Credits
<b>Program Course List</b>		
<i>Program-Specific Courses</i>		
E T 505	Special Topics in Information Technology <sup>2</sup>	3
E T 539	Advanced Enterprise Security <sup>1</sup>	3
E T 551	Enterprise Architecture I <sup>1</sup>	3
E T 552	Enterprise Architecture II <sup>1</sup>	3
E T 555	Virtualization <sup>1</sup>	3
E T 562	Development and Operations <sup>1</sup>	3
E T 577	Advanced Computer Networking <sup>1</sup>	3
E T 583	Mobile App Programming and Development <sup>2</sup>	3
E T 585	White Hat System Testing <sup>2</sup>	3
E T 595	Capstone Projects in Information Technology <sup>1</sup>	3
<i>Optional Electives Outside of the Department/College <sup>3</sup></i>		
BCIS 550	Information Systems Analysis and Design	
BCIS 575	Database Management Systems	
BCIS 561	Business Analytics I	
BCIS 566	Business Analytics II	

BCIS 585	Enterprise Resource Planning & Business Processes	
C S 502	Database Management Systems I	
C S 505	Artificial Intelligence I	
C S 508	Introduction to Data Mining	
C S 509	Bioinformatics Programming	
C S 519	Applied Machine Learning I	
I E 523	Advanced Engineering Economy	
I E 563	Topics in Engineering Administration	
I E 571	Advanced Quality Control	
Total Credits		30

<sup>1</sup> Masters of Information Technology required course

<sup>2</sup> Masters of Information Technology Recommended Elective.

<sup>3</sup> See your faculty advisor for more information about selecting elective courses outside the department and/or the college.