

Programme Name	Master of Engineering (Maintenance Engineering)
Programme Description	<p>The degree of Master of Engineering is awarded through research for 240 credit points, at level 9, distributed within 2 years of research work for a full time student and 4 years for part time student.</p> <p>The program is supervised by internal and external supervisors and progress monitored by the post graduate committee of the college through seminars conducted every 6 months.</p> <p>The research work is undertaken on an industrial engineering plant/system and culminates in a thesis presentation. The research work must result in, at least, one paper each in a national and international peer reviewed journal.</p> <p>The program is administered through research work only and relies on original, independent, analytical research work undertaken by the student in an industrial environment</p>
Majors	Maintenance Engineering
Entry Requirements	<ul style="list-style-type: none"> • Students with BE (Honours) in mechanical/electrical engineering or equivalent with a GPA of 3.0 (out of 5) are eligible for the programme. Students with less than 3 GPA should have served in an industry for at least 2 years or have a teaching experience at tertiary level. • Students with a normal BE (without honours, 700 level courses) should have at least 5 years' industrial experience in the field of operation and maintenance engineering. • Depending upon the background of the students, as analysed by Dean or PG committee, students may have to qualify 3 courses, at 800 levels, before commencing the research work.
Duration	<ul style="list-style-type: none"> • The program duration is 2 years for full time students with an extension of 1 year. • The program duration is 4 years for part time students with an extension of maximum 2 years. • Extension over the above periods would be decided on a case to case basis by the PG committee of the college.
Supervision	<ul style="list-style-type: none"> • All students enrolled in the program would have at least 2 supervisors; a principal and an associate or co-supervisor. The supervisors will be the link between the student and the college post graduate committee.
Programme Type	Full Time Masters
College Name	College of Engineering, Science & Technology
Campus	Derrick Campus
Credit Points	240

COURSE STRUCTURE				
Course code	Course Title	Course Highlights	FQF level	Credit Points
MTH801	Research Methods (to be decided by PGC)	Plan, design and conduct research. Carry out data collection and data analysis using quantitative research methods	800	20
MEC820	Reliability and Maintenance Engineering (to be decided by PGC)	Reliability and maintenance engineering concepts including simulation of large and complex engineering systems	800	20
MEC821	Operational Research for Engineering Applications (to be decided by PGC)	Operational research methods. Solution of defined problems through Matlab. Evolutionary Algorithms.	800	20
MEC901	Major Research Project (Thesis)	Critical analysis of engineering systems of an industrial set up. Optimization of maintenance strategy to maximize reliability, availability and safety and minimization of costs	900	240

