

<b>Programme Name</b>	<b>Diploma in Engineering (Renewable and Sustainable)</b>
<b>Programme Description</b>	<p>This programme aims to produce graduates who will meet the need to cope with the challenge of increased in renewable engineering demand and in view of the growing awareness of society towards the environment. Graduates with a sound scientific and technical knowledge who are also sensitive to the needs of the society and environment are the need of the hour.</p> <p>The programme has been designed in such a way so as to allow the graduates develop a basic all-round knowledge in various engineering fields and at the same time enable them to gain a high level of professionalism in their chosen field of engineering with an insight into engineering management principles. The programme also allows them to understand the principles of rational use of resources and inculcates in them, organizational discipline and basic supervisory skills which will prove beneficial to them and to the organization they would serve in, after finishing their education.</p>
<b>Majors</b>	Renewable and Sustainable Engineering
<b>Minimum Requirements</b>	Pass in Year 12 with 200 out of 400 marks with 50% minimum marks in English, Mathematics, Physics/ Technical Drawing/Applied Technology /Chemistry, and 1 other science or Technology subject or Completion of Certificate IV programme
<b>Duration</b>	1. 3 years (5 semesters plus 6 months of Industry Attachment) 2. Part time students may take 4 to 6 years to complete the programme.
<b>Programme Type</b>	Diploma
<b>College Name</b>	College of Engineering, Science and Technology
<b>Campus</b>	Derrick Campus Samabula
<b>Credit Points</b>	360

<b>Programme Structure</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credit Points</b>
<b>Year 1 Semester 1</b>		
COM402	Technical Communication for Engineers	12
MTH410	Engineering Mathematics I	12
MCD517	Applications of Material Science	12
MCD518	Engineering Graphics	12
CSD410	Introduction to Computer Applications	12
<b>Year 1 Semester 2</b>		
MTH519	Engineering Mathematics II	12
MCD521	Applied Mechanics: <i>Statics</i>	12
MCD523	Engineering Workshop Practice	12
EED460	Electrical and Electronics Engineering for Technologists	12
MCD522	Applied Thermodynamics	12
<b>Year 2 Semester 1</b>		
MCD531	3D Solid Modeling and Analysis	12
DRE531	Wind Energy System	12

MCD535	Mechanical Workshop Practice	12
DRE533	Electrical Machine Drives and Control	12
MCD534	Fluid Mechanics and Machinery	12
	<b>Year 2 Semester 2</b>	
DRE641	Biomass Energy Systems	12
DRE642	Solar Energy System	12
DRE643	Renewable Energy Project	12
PED601	Engineering Project Management	12
MCD642	Instrumentation & Control/Programmable Logic Controller	12
	<b>Year 3 Semester 1</b>	
DRE651	Energy Conservation Technology	12
DPL653	Business Management Techniques for Engineers	12
DRE652	Energy, Audit, Security, Policy and Planning	12
DRE644	Hydro Electric Power System	12
PED602	Engineering Capstone Project	12
	<b>Year 3 Semester 2</b>	
IAA600	Industrial Attachment	60
<b>Total Credit Points</b>		<b>360</b>

Course Prerequisite		
Course Code	Course Title	Prerequisite
COM402	Technical Communication for Engineers	MER
MTH410	Engineering Mathematics I	MER
MCD511	Applications of Material Science	MER
MCD512	Engineering Graphics	MER
CSD410	Introduction to Computer Applications	MER
MTH519	Engineering Mathematics II	MTH410
MCD521	Applied Mechanics: <i>Statics</i>	MER
MCD523	Engineering Workshop Practice	MER
EED460	Electrical and Electronics Engineering for Technologists	MER
MCD522	Applied Thermodynamics	MER
MCD531	3D Solid Modeling and Analysis	MCD512
DRE531	Wind Energy System	MER
MCD535	Mechanical Workshop Practice	MCD523
DRE533	Electrical Machine Drives and Control	EED460
MCD534	Fluid Mechanics and Machinery	MER
DRE641	Biomass Energy Systems	MER
DRE642	Solar Energy System	MER
DRE643	Renewable Energy Project	MCD535
PED601	Engineering Project Management	MER
MCD642	Instrumentation & Control/Programmable Logic Controller	EED460
DRE651	Energy Conservation Technology	MER
DPL643	Business Management Techniques for Engineers	MER

DRE652	Energy, Audit, Security, Policy and Planning	MER
DRE644	Hydro Electric Power System	MER
PED602	Engineering Capstone Project	DRE643
IAA600	Industrial Attachment	