

<b>Programme Name</b>	<b>Diploma in Engineering (Renewable and Sustainable)</b>
<b>Programme Description</b>	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. 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.
<b>Majors</b>	Renewable and Sustainable Engineering
<b>Minimum Requirements</b>	<ol style="list-style-type: none"> <li>1. Minimum entry requirement (MER) for this program shall be a pass in the Fiji School Leaving Certificate (12 years of education with continuous progression) or its equivalent with at least 50% marks in Mathematics, English, Physics/ Introduction to Technology and any one of the following subjects : Chemistry, Technical Drawing, Metal Technology or Computer Studies.</li> <li>2. Holders of Certificate IV or equivalent in relevant discipline may also be admitted into the program.</li> <li>3. Under exceptional circumstances mature applicants with relevant industrial experience may also be admitted.</li> </ol>
<b>Duration</b>	<ol style="list-style-type: none"> <li>1. 3 years (5 semesters plus 6 months of Industry Attachment)</li> <li>2. Part time students may take 4 to 6 years to complete the programme.</li> </ol>
<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
MED517	Applications of Material Science	12
MED518	Engineering Graphics	12
CSD410	Introduction to Computer Applications	12
<b>Year 1 Semester 2</b>		
MTH519	Engineering Mathematics II	12
MED521	Applied Mechanics: <i>Statics</i>	12
MED523	Engineering Workshop Practice	12
EED460	Electrical and Electronics Engineering for Technologists	12
MED522	Applied Thermodynamics	12
<b>Year 2 Semester 1</b>		
MED531	3D Solid Modeling and Analysis	12
DRE531	Wind Energy System	12

MED535	Mechanical Workshop Practice	12
DRE533	Electrical Machine Drives and Control	12
MED534	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
MED642	Instrumentation & Control/Programmable Logic Controller	12
	<b>Year 3 Semester 1</b>	
DRE651	Energy Conservation Technology	12
DPL643	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>	
PED601	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
MED511	Applications of Material Science	MER
MED512	Engineering Graphics	MER
CSD410	Introduction to Computer Applications	MER
MTH519	Engineering Mathematics II	MTH410
MED521	Applied Mechanics: <i>Statics</i>	MER
MED523	Engineering Workshop Practice	MER
EED460	Electrical and Electronics Engineering for Technologists	MER
MED522	Applied Thermodynamics	MER
MED531	3D Solid Modeling and Analysis	MED512
DRE531	Wind Energy System	MER
MED535	Mechanical Workshop Practice	MED523
DRE533	Electrical Machine Drives and Control	EED460
MED534	Fluid Mechanics and Machinery	MER
DRE641	Biomass Energy Systems	MER
DRE642	Solar Energy System	MER
DRE643	Renewable Energy Project	MED535
PED601	Engineering Project Management	MER
MED642	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
PED601	Industrial Attachment	