

Introduction of the Sector

Power is the most critical requirement towards the development and social parity of any country. With the increasing focus on Sustainable Development and resulting Sustainable Development Goal it is pertinent to harness the Renewable Sources of the Energy to its fullest. The existing source of power generation are also gradually being converted into more sustainable alternatives viz. Solar, Wind, Biomass etc.

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Renewable Energy is generated through various natural resources such as biomass, sun, wind, tides waves and water (hydroelectric power). India has a vast supply of renewable energy resources and it has one of the largest programmes in the world for deploying renewable energy products and systems. Newer renewable electricity sources are targeted to grow massively by year 2022.

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As of 2018, India ranked 4th in wind power, 5th in solar power, and 5th in renewable power installed capacity.

As a part of the Paris Agreement, the Government of India has set an ambitious target of achieving 175 GW of renewable energy capacity by 2022, and 500 GW by 2030.

The awareness for clean energy in domestic and industrial setups with government incentives points to a bright future for trained professionals.

B. Voc. in Renewable Energy Technology

Course Introduction

B. Voc. in Renewable Energy course deals with each source of renewable energy and the technical aspects associated with them. Let us consider solar energy as an example. The academic program deals with various aspects of solar energy such as – photovoltaic technology, solar power system, solar panels, installation, configuration, cost estimation etc.

Eligibility for Admission

The eligibility for admission to B. Voc. in Renewable Energy Technology in shall be 10+2 or equivalent, in any stream.

Career Prospects

Some of the prime recruiters are Solar Energy Firms, Wind Energy Technology Firms, Tidal Energy Technology Firms and Equipment Manufacturing Firms

Semester-wise Listing of courses

Semester	Subject Code	Subject Name	Credit
I	GE 1.1	Functional English	4
	GE 1.2	Communication Skills - I	4
	GE 1.3	Computing Skills - I	4
	RET 1.01	Fundamentals of Solar Energy	2
	RET 1.02	Solar Radiation and Energy Conversion	2
	RET 1.03	Solar Thermal Engineering and Application	2
	RET VP 1.1.1.1	Vocational Practical	12
II	GE 2.1	Basics of Economics and Markets	4
	GE 2.2	Environment Sciences	4
	GE 2.3	Ethics and Governance	4
	RET 2.01	Solar Photo Voltaic System and Plants	2
	RET 2.02	Site assessment array structural design	2
	RET 2.03	Solar Energy storage and Load Management	2
	RET VP 2.1	Installation of 1 KW Project of Stand Alone PV System (Vocational Practical)	12
III	GE 3.1	Communication Skills II	4
	GE 3.2	Financial Literacy	4
	GE 3.3	Basics of Legal and HR Policies	4
	RET-3.01	Bio-Gas, Bio-Mass and Bio Fuels	2
	RET 3.02	Environmental Impact Assessment (EIA) Waste to Energy Conversions	2
	RET 3.03	Micro-Hydro Power, Hydrogen Energy and Fuel Cell	2
	RET VP 3.1	Lab-Alternate Energy Generation (Vocational Practical)	12
IV	GE 4.1	Computing Skills - II	4
	GE 4.2	Basics of Accounting	4
	GE 4.3	Design Thinking	4
	RET 4.01	Wind Energy Technology and Systems	2

	RET 4.02	Other Renewable Energy Resources	2
	RET 4.03	Solar Architect and Green Concept in building	2
	RET VP 4.1	Minor Project Report Submission (Vocational Practical)	12
V	GE 5.1	Digital Literacy	4
	GE 5.2	Health and Wellness	4
	GE 5.3	Personal Grooming	4
	RET 5.01	Power Plant Engineering	2
	RET 5.02	Energy Management Auditing and Energy Conversion	2
	RET 5.03	Economics and Financing of Renewable Energy Systems	2
	RET VP 5.1	Practical Estimation and Costing of RE projects (Vocational Practical)	12
VI	GE 6.1	Entrepreneurship	4
	GE 6.2	Employment Readiness	4
	GE 6.3	Effective Workplace Skills & Competencies	4
	RET 6.01	Introduction to Energy Financing	2
	RET 6.02	Grid Integration and Distributed Generation of RE	2
	RET 6.03	Operations and Maintenance and plant safety.	2
	RET VP 6.1	Major Project report Submission (Vocational Practical)	12

Programme fees: Rs. 36,000/-per annum

Examination fees: Rs. 1,600/- per semester and Rs. 3200 per annum

Caution Deposit (Refundable): Rs.5000