

Dr. Thirumalesh <thirumalesh@rljit.in>

Regarding confusion in the 'Renewable Energy sources' (ETC) subject code

1 message

Thirumalesh T <thirumalesh@rljit.in>
To: registrar@vtu.ac.in, re@vtu.ac.in
Cc: principal@rljit.in

Tue, Jan 24, 2023 at 4:14 PM

Respected Sir,

As per the new 2022 curriculam new cluster of subjects with cluster title **'Emerging Technolgy Courses'** with subject codes **22ETC15X/25X** has been introduced. Under this custer one of the subject with title "Renewable Energy Sources" has some confusion in subject code. In the scheme and blowup of the syllabus the subject code is mentioned as "**22ETC15E**" but in the syllabus copy and the model question paper it is mentioned as "**22ETS15E**". So it is creating confusion in the students as well as the teaching fraternity that, whether it is "**22ETC15E**" or "**22ETS15E**". I think it should be 22ETC15E, because it is under ETC cluster.

The screenshots of the scheme and syllabus copies are attached herewith, for your kind reference.

In the Scheme and blowup of the syllabus it is mentioned as 22ETC15E

(ESC-I) Engineering Science Courses-I				(ETC-1) Emerging Technology Courses-I				
Code	Title	L	T	P	Code	Title	L	1
22ESC141	Introduction to Civil Engineering	3	0	0	22ETC15A	Smart Materials and Systems	3	(
22ESC142	Introduction to Electrical Engineering	3	0	0	22ETC15B	Green Buildings	3	1
22ESC143	Introduction to Electronics Engineering	3	0	0	22ETC15C	Introduction to Nano Technology	3	1
22ESC144	Introduction to Mechanical Engineering	3	0	0	COURTCALD	Introduction to Eustainable Engineering	3	1
22ESC145	Introduction to C Programming	2	0	2	22ETC15E	Renewable Energy Sources	3	
					EEETC15F	Waste Management	3	Т
					22ETC15G	Emerging Applications of Biosensors	3	T
		_			22ETC15H	Introduction to Internet of Things (IOT)	3	1
					22ETC15I	Introduction to Cyber Security	3	
(PLC-I) Pro	gramming Language Courses-I		-	_			+	t
Code	Title	L	T	P				Т
22PLC15A	Introduction to Web Programming	2	0	2				Т
22PLC15B	Introduction to Python Programming	2	0	2			+	t
22PLC15C	Basics of JAVA programming	2	0	2				t
22PLC15D	Introduction to C++ Programming	2		2			_	t
The course	22ESC145/245, Introduction to C Program	mmir	ıg, a	ind	all courses u	nder PLC and ETC groups can be taught by AN	Y	100

BLOWUP SYLLABUS

First Semester R.E.

RENEWABLE ENERGY SOURCES (Emerging Technologies Course-I)

(22ETC15E)

(Effective from the academic year 2022-23)

Topics	Topics To Be Covered	Hours	
277	Module-I: Introduction		
Introduction: Principles of Renewable Energy.	Introduction brief explanation of non-renewable (conventional) and renewable (non-conventional) energy sources. Article No:1.5 of Textbook 1	02	
Energy and sustainable	Principles of Renewable Energy.		
development, fundamentals and	Article No:1.5 of Textbook 1		
social implications. worldwide renewable energy availability, renewable energy availability in India, brief descriptions on solar energy, wind energy, tidal energy, wave energy, ocean thermal energy, biomass energy, geothermal energy,	Availability of renewable energy in India and world Article No: 1.12.1 to 1.12.10 of Textbook 4		
Oil shale.	Article No: 1.13.1 to 1.13.4 of Textbook 4	02	
Introduction to Internet of energy (IOE).	Introduction to Internet of energy (IOE). https://www.investopedia.com/terms/i/internet-energy From internet	02	
	Total	08	
	Module-II: Solar Energy		
Solar Radiation. Introduction Solar constant Article No: 2.1 & 2.2 of Textbook 1		01	
Estimation of solar radiation on	Solar radiation at the earth surface-beam diffuse solar radiation, solar		

In the syllabus copy it is 22ETS15E

11.12.2022

RE	ENEWABLE ENERGY SOL	URCES	
Course Code:	22ETS15E/25E	CIE Marks	50
Course Type	Theory	SEE Marks	50
(Theory/Practical/Integrated)		Total Marks	100
Teaching Hours/Week (L:T:P: S)	3:0:0:0	Exam Hours	03
Total Hours of Pedagogy	40 hours	Credits	03

Course objectives

- . To understand energy scenario, energy sources and their utilization.
- To explore society's present needs and future energy demands.
- To Study the principles of renewable energy conversion systems.
- To exposed to energy conservation methods.

Teaching-Learning Process

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes and make Teaching –Learning more effective

- 1. Use pie chart showing distribution of renewable energy sources
- 2. Use wind turbine models
- 3. Use sun path diagrams

Module-1 (08 hours)

Introduction: Principles of renewable energy; energy and sustainable development, fundamentals and social implications, worldwide renewable energy availability, renewable energy availability in India, brief descriptions on solar energy, wind energy, tidal energy, wave energy, ocean thermal energy, biomass energy, geothermal energy, oil shale. Introduction to Internet of energy (IOE).

Module-2 (08 hours)

Solar Energy: Fundamentals; Solar Radiation; Estimation of solar radiation on horizontal and inclined surfaces; Solar radiation Measurements- Pyrheliometers, Pyrometer, Sunshine Recorder. Solar Thermal systems: Flat plate collector; Solar distillation; Solar pond electric power plant.

Solar electric power generation- Principle of Solar cell, Photovoltaic system for electric power generation, advantages, Disadvantages and applications of solar photovoltaic system.

Module-3(08 hours)

In Model question paper its given as 22ETS15/25E

Model Question Paper

First Semester B.E. Degree Examination

Renewable Energy Sources 22ETS15E/25E

Time: 03 Hours

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing at least ONE question from each module.

		8/12 35 30 48	Marks
		Module -1	
Q. 1	a	Briefly explain the principles of renewable energy, energy & sustainable development and the implications of renewable energy	10
	b	Discuss renewable energy availability in India and worldwide.	10
		OR	
Q. 2	a	Briefly describe solar, wind and biomass energy.	10
	b	Briefly describe energies from the ocean.	10
	- 10 - 10	Module-2	
Q. 3	a	Explain solar radiation and its estimation.	10
	b	Explain the pyranometer and pyrheliometer.	10
		OR	102
Q. 4	a	Explain solar flat plate collector.	10
	b	Explain the principle of the solar photovoltaic cell.	10
		Module-3	
Q. 5	a	Describe wind energy availability in India and the major problems associated with it.	10
	b	Explain with a sketch the basic components of the wind energy conversion system (WECS).	10
		OR	R
Q. 6	a	Explain the photosynthesis process.	05
		est 20 22 2 2 4 4 2	0.8

So, please correct this mistake and update the same in the VTU website.

Thank you

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Thirumalesh
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Dr. Thirumalesh <thirumalesh@rljit.in>

Feedback regarding the updated CIE and SEE evaluation methods for 2022 scheme

3 messages

Thirumalesh T <thirumalesh@rljit.in>

To: registrar@vtu.ac.in, re@vtu.ac.in

Cc: Principal- RLJIT <principal@rljit.in>

Thu, Jul 13, 2023 at 5:30 PM

Respected Sir,

With respect to the circular dated 10th June 2023 bearing No. **VTU/BGM/Aca/BoS/2023/1291**, regarding the updated CIE and SEE evaluation method, we have a submission and requesting clarification.

In that circular, the evaluation methods for the 4-Credit IPCC course, 3 & 2-Credit courses, and for 1-Credit courses are explained very clearly and there is no doubt of that. But in the curriculum, there are some 3-Credit courses with integrated lab components for example **BPOPS103** - Principles of Programing using C, and all PLC-1/2 courses **BPLCK1/205A to D**, there is no information about the evaluation methods for these courses. Of course, we may assume the same pattern of evaluation of 4-Cretid courses, but please provide an official confirmation regarding this.

Thanking you

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Sadashiv Halbhavi <sbhvtuso@yahoo.com>

To: "Thirumalesh T\"" <thirumalesh@rliit.in>

Cc: "Registrar, VTU Belagavi" <registrar@vtu.ac.in>

Fri, Jul 14, 2023 at 2:00 PM

Professor,

for 3 credits IPCC method suggested for 4 credits IPCC shall be followed

Thanks and Regards

Prof. Sagar B. Halbhavi Special Officer, VTU Belagavi-590018 0831-2498108

ಮನುಷ್ಯನ ಉತ್ತಮ ಅಭ್ಯಾಸವೆಂದರೆ ತಮ್ಮ ಆತ್ಮಸಾಕ್ಷಿಯೊಡನೆ ಪ್ರಾಮಾಣಿಕತೆ

On Friday, 14 July, 2023 at 12:33:28 pm IST, Registrar, VTU Belagavi <registrar@vtu.ac.in> wrote:

Registrar's Office, Visvesvaraya Technological University, (State University of Government of Karnataka Established as per the VTU Act, 1994) "Jnana Sangama",Belagavi-590 018, Karnataka, IndiaTel: +91 831 2405468 12/10/2023, 02:52

[Quoted text hidden]

Thirumalesh T <thirumalesh@rljit.in>
To: Sadashiv Halbhavi <sbhvtuso@yahoo.com>

Fri, Jul 14, 2023 at 4:14 PM

Thank you very much for the clarification Sir, [Quoted text hidden]