

SHORT TERM COURSE

WIND ENERGY AND ITS APPLICATION IN POWER GENERATION

+91-958027739,

+91-9005461633,

+91-781-2513013

The objective of the course is to give the participants experience with applying the established engineering knowledge to specific wind turbine problems. In relation to this, the participants will learn about analysing advantages, problems and principles in power obtained from wind energy. They will be able to understand wind as an energy source and a dynamic load source for the wind turbine, understand how power and load are transferred through the construction and understand how the individual components interact.



Anurag.fet@ramauniversity.ac.in

REGISTRATION
Till 10th FEB, 2020

DURATION
30 HRS

FEE
INR 1000

CERTIFICATION
PROGRAMME

To,
The Dean,
FET, Rama University, Kanpur,

Dated 18/10/2019

Sub: Regarding Short Term course organizing in Mechanical Engineering Department.

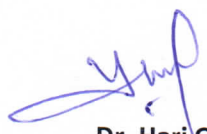
Dear Sir,

We are pleased to inform you, our mechanical engineering department has been organizing a short term course on **"Wind Energy and its Application in Power Generation"** from 25-Oct, 2019 to 30-Nov, 2019. A Detailed information and schedule attached to this letter. We are requested to you, to approve it so that it starts as soon as possible.

Thank you.


18/10/19
Devendra Kumar Lohia
(Hod , ME Department)

Mechanical Engineering
FET, Rama University
Kanpur


18/10/19
Dr. Hari Om Sharan
(Dean, FET Rama University)



RAMA UNIVERSITY, KANPUR
FACULTY OF ENGINEERING & TECHNOLOGY
MECHANICAL ENGINEERING DEPARTMENT

SHORT TERM COURSE

On

“Wind Energy and its Application in Power Generation”

The overall goal with this summer school is to give the students a substantial knowledge of wind turbine technology.

Objective: The objective of the course is to give the participants experience with applying the established engineering knowledge to specific wind turbine problems. In relation to this, the participants will learn about analysing advantages, problems and principles in power obtained from wind energy. They will be able to understand wind as an energy source and a dynamic load source for the wind turbine, understand how power and load are transferred through construction and understand how the individual components interact.

Course Content:

1. **Basic Fundamentals**
 - a. Define Basic terms and definitions
 - b. Know how the wind generates
 - c. Explore the methods to extract energy from winds using various types of device
 - d. Explain the detailed theory involved in harnessing wind energy
 - e. Explain components of wind energy generation system
2. **Design concept**
 - a. Explain design of blades, shaft and other components
 - b. Selection of bearing and other components
 - c. Selection of site suitability for sitting of turbine
3. **Fabrication and Assembling**
 - a. Fabrication of Blades
 - b. Fabrication of support structure
 - c. Assembling of wind turbine components
4. **Testing**
 - a. Testing of turbine under deferent site conditions
 - b. Record the results for future analysis
5. **Installation of turbine at suitable site selected at ██████ Campus.**

Course Duration: -No of Intact Hrs (.....30.....)

Course Timings: -

Course Fee: - INR...1000

Student can register under following Faculty members:

1. Mr. Anurag Kumar (9005461633)
2. Mr. Hemant Sharma(7986613013)

DLI
10/10/19

Mr. Devendra Kr. Lohiya
HOD - ME

Distribution:

Dean (A) (For kind information)

HOD'S

Hostels

Notice Boards

List of Student Registered for Short Term Course
 Mechanical Engineering Department, FET, Rama University

S. No.	Student Name	Roll No.	Branch	Year	Date of Registration	Amount Submitted	Remarks
1	RANJEET KUMAR GAUTAM	1704529004	M.E	3 rd	21/11/19	RN/1718/193473	1000/-
2	DEVENDRA	1704526004	M.E	3 rd	21/11/2019	RN/1718/193472	1000/-
3	Brijendra Singh	1704531006	M.E	3 rd	14/2/2020	RN/17-18/200333	1000/-
4	Anshuman Baibai	1904526002	M.E (DIP)	1 st	15/02/2020	RN/19-20/200434	1000/-
5	Manu Pal	RUM1911149	M.E	1 st	18/02/2020	RN/19-20/200570	1000/-
6	Raj maharaj Pal	19367335321005	M.E	1 st	18/02/2020	RN/19-20/200566	1000/-
7	Shivam Pal	1904526005	M.E	1 st	18/02/2020	RN/19-20/200568	1000/-
8	Ankit srivastava	19367335321019	M.E	1 st	18/02/2020	RN/19-20/200564	1000/-
9	Sushil Kumar	RUM1010455	M.E	1 st	18/02/2020	RN-19-20/200565	1000/-
10	Shobhit kumar	RUM1911312	M.E	1 st	19/02/2020	RN-19-20/200647	1000/-
11							
12							
13							
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15							
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17							
18							
19							
20							



 Vetted By **Anurag Kumar**
 Mechanical Engineering
 Devendra Kumar Lohia
 (HoD ME Deptt.)

Anurag Kumar
 Co-ordinator

**Attendance Short Term Course /Value added courses
Mechanical Engineering Department, FET, Rama University
Wind Energy and its Application in Power Generation**

SR	NAME	BRANCH	ROLL IF ANY LECTURES DATE	DATE				
				1	2	3	4	5
1	Ranjeet Kumar gautam	Mechanical	1704529004	25/10/2019 Ranjeet	26/10/2019 Ranjeet	01/11/2019 Ranjeet	02/11/2019 Ranjeet	08/11/2019 Ranjeet
2	Devendra	Mechanical	1704526004	Devendra	Devendra	Devendra	Devendra	Devendra
3	Pritendra singh	Mechanical	1704531006	Ansuman	Ansuman	Ansuman	Ansuman	Ansuman
4	Ansuman Bajpey	Mechanical	1904526002	Monu Pal	Monu Pal	Monu Pal	Monu Pal	Monu Pal
5	Monu Pal	Mechanical	RUM1911149	Shivam	Shivam	Shivam	Shivam	Shivam
6	BrijMohan Pal	Mechanical	1936735321005	Shivam	Shivam	Shivam	Shivam	Shivam
7	Shivam Pal	Mechanical	1904526005	Sushil	Sushil	Sushil	Sushil	Sushil
8	Ankit Srivastav	Mechanical	1936735321019	Sushil	Sushil	Sushil	Sushil	Sushil
9	Sushil Kumar	Mechanical	RUM1010455	Shobhit	Shobhit	Shobhit	Shobhit	Shobhit
10	Shobhit Kumar	Mechanical	RUM1911312	Shobhit	Shobhit	Shobhit	Shobhit	Shobhit

Attendance Short Term Course /Value added courses
Mechanical Engineering Department, FET, Rama University
Wind Energy and its / Application in Power Generation

SR	NAME	BRANCH	ROLL IF ANY		DATE				
			LECTURES	DATE	1	2	3	4	5
1	Ranjeet Kumar gautam	Mechanical		1704529004	09/11/2019	14/11/2019	15/11/2019	16/11/2019	21/11/2019
2	Devendra	Mechanical		1704526004	Ranjeet	Ranjeet	Ranjeet	Ranjeet	Ranjeet
3	Pritendra singh	Mechanical		1704531006	(A)	(A)	(A)	(A)	(A)
4	Ansuman Bajpey	Mechanical		1904526002	(A)	Anshuman	Anshuman	Anshuman	Anshuman
5	Monu Pal	Mechanical		RUM1911149	Manu Pal	Manu Pal	Manu Pal	Manu Pal	Manu Pal
6	BrijMohan Pal	Mechanical		1936735321005	Bojit	Bojit	Bojit	Bojit	Bojit
7	Shivam Pal	Mechanical		1904526005	Shivam	Shivam	Shivam	Shivam	Shivam
8	Ankit Srivastav	Mechanical		1936735321019	(A)	(A)	(A)	(A)	(A)
9	Sushil Kumar	Mechanical		RUM1010455	Sushil	Sushil	Sushil	Sushil	Sushil
10	Shobhit Kumar	Mechanical		RUM1911312	Shobhit	Shobhit	Shobhit	Shobhit	Shobhit

Wind Energy and its Application in Power Generation (Short Term Course)

Conducted by : Anurag Kumar (Assistant Professor - Mechanical)

25/10/2019 - 30/11/2019

Time Table

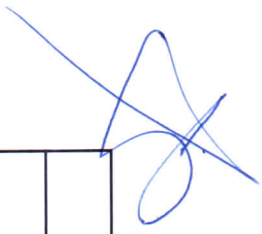
S.No.	Date	Time	Topic
1	25/10/2019	3:00pm - 5:00pm	How Wind Turbines Work
2	26/10/2019	3:00pm - 5:00pm	Wind Turbine Technology: Components and operation.
3	01/11/2019	3:00pm - 5:00pm	Wind Resource Assessment: Site evaluation techniques.
4	02/11/2019	3:00pm - 5:00pm	Grid Integration: Challenges and solutions.
5	08/11/2019	3:00pm - 5:00pm	Environmental impact: Wildlife and landscape considerations.
6	09/11/2019	3:00pm - 5:00pm	Maintenance Practices: Efficiency and safety measures.
7	14/11/2019	3:00pm - 5:00pm	Policy and Regulations: Governance frameworks.
8	15/11/2019	3:00pm - 5:00pm	Future Trends: Innovations and Potential advancements.
9	16/11/2019	3:00pm - 5:00pm	Storing Wind Energy for Later Use.
10	21/11/2019	3:30pm - 5:00pm	Setting Up Small- Scale Power Systems.
11	22/11/2019	3:30pm - 5:00pm	Using Wind Energy to Fight Climate Change.
12	23/11/2019	10:00am - 11:30am	Involving Communities in Wind Projects.
13	23/11/2019	3:30pm - 5:00pm	New and improved Wind Technologies.
14	25/11/2019	3:30pm - 5:00pm	Learning from Real-Life Examples.
15	26/11/2019	3:30pm - 5:00pm	Managing Wind Projects Efficiently.

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24/11/19

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Managing Wind Projects Efficiently.

16	27/11/2019	3:30pm - 5:00pm	16	27/11/20	Figuring Out Costs and Benefits.	Figuring Out Costs and Benefits.
17	28/11/2019	3:30pm - 5:00pm	17	28/11/20	Predicting Wind Power Output.	Predicting Wind Power Output.
18	29/11/2019	3:30pm - 5:00pm			Using Wind Power Locally.	
19	30/11/2019	3:30pm - 5:00pm			Getting Support from Communities.	



17/5/19

HOD
 Mechanical Engineering
 FET, Rama University
 Kuvempu

Attendance Short Term Course /Value added courses
Mechanical Engineering Department, FET, Rama University
Wind Energy and its Application in Power Generation

SR	NAME	BRANCH	ROLL IF ANY						
			LECTURES	DATE	1	2	3	4	5
1	Ranjeet Kumar gautam	Mechanical	1704529004	22/11/2019	Ranjeet	23/11/2019	24/11/2019	25/11/2019	26/11/2019
2	Devendra	Mechanical	1704526004		Devendra				
3	Pritendra singh	Mechanical	1704531006						
4	Ansuman Bajpey	Mechanical	1904526002		Ansuman				
5	Monu Pal	Mechanical	RUM1911149		Monu Pal				
6	BrijMohan Pal	Mechanical	1936735321005						
7	Shivam Pal	Mechanical	1904526005		Shivam				
8	Ankit Srivastav	Mechanical	1936735321019						
9	Sushil Kumar	Mechanical	RUM1010455		Sushil				
10	Shobhit Kumar	Mechanical	RUM1911312		Shobhit				

**Attendance Short Term Course /Value added courses
Mechanical Engineering Department, FET, Rama University
Wind Energy and its Application in Power Generation**

SR	NAME	BRANCH	ROLL IF ANY LECTURES	DATE				
				1	2	3	4	5
			DATE	27/11/2019	28/11/2019	29/11/2019	30/11/2019	
1	Ranjeet Kumar gautam	Mechanical	1704529004	Ranjeet	Ranjeet	Ranjeet	Ranjeet	
2	Devendra	Mechanical	1704526004	Devendra	Devendra	Devendra	Devendra	
3	Pritendra singh	Mechanical	1704531006	(A)	(A)	(A)	(A)	
4	Ansuman Bajpey	Mechanical	1904526002	Ansuman	Ansuman	Ansuman	Ansuman	
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RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

ORDINANCES GOVERNING CAREER ORIENTED

SHORT-TERM COURSES *Offered by*

Department of Mechanical Engineering

Faculty of Engineering and Technology

RAMA UNIVERSITY UTTAR PRADESH, KANPUR

VAVT



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

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RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

Part: 1

Ordinance Governing Career Oriented Short Term Courses



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

I. General Provisions

1. The program of study leading to Career Oriented Short Term Course (Certificate Program) of Department of Mechanical Engineering, Faculty of Faculty of Engineering and Technology of Rama University Uttar Pradesh, Kanpur shall be of Eight weeks, and shall be basically for the persons who are having interest in this field or they want to build their career in the web development field. The program shall have the status of Add-on Skill Oriented Program under Career Oriented Sort Term Course.
2. The Certificate programs shall have the status of "Short Term Courses" of Rama University Uttar Pradesh, Kanpur and shall be governed by the general rules of the Short Term Courses.
3. The intake to the Certificate Courses shall be 30, which may be increased to 60 (Two Batches) in due course of time by a resolution of the University.
4. The Program of study leading to Career Oriented Short Term Course (Certificate Program) of the Rama University Uttar Pradesh, Kanpur shall be conducted in the Department of Mechanical Engineering under the Faculty of Engineering and Technology in the evening hours or during any such duration which would be appropriate.
5. The admission to Career Oriented Short Term Course (Certificate Program) shall be dealt with by the Dean, Faculty of Engineering and Technology. The last date for the receipt of the application form shall be fixed by the Dean of the Faculty.
6. The candidate seeking admission will have to apply on a prescribed format available from the University/ Faculty on payment of prescribed fee.
7. The candidate may be required to pay the processing fee as directed by the Faculty from time to time. No Application Form shall be considered for admission unless it is complete in all respects including attested copies of the photographs of the candidates containing his/her signature thereon and all necessary documents are attached thereto, such as:
 - a) Attested copies of mark-sheets of all the examinations passed;
 - b) Certificate from an appropriate authority certifying that the candidate belongs to Scheduled Caste/Scheduled Tribe/OBC or that the candidate is Physically Challenged.
8. The provisional admission to the Program shall be made in order of merit based or on the candidate's performance in TEST/GD/PI, and academic record.
9. The completed Application Forms for registration at Faculty of Engineering and Technology, Rama University Uttar Pradesh, Kanpur along with documents required under ordinance at above point 6 shall be sent to the Registrar.
10. Provisional admission cannot be claimed by any applicant as a matter of right. The provisional admission or readmission of an applicant shall be entirely at the discretion of the Admission Committee, which may refuse to admit any candidate without assigning any reason thereof.
11. Provisional admission will be made strictly on combined merit and availability of seats on the
 - ii) If the candidate is found at a later stage to have provided any false information, and /or
 - iii) If he/she has been punished for an act of gross misconduct, indiscipline or an act involving moral turpitude.
13. There shall be an Admission Committee for Career Oriented Short Term Course (Certificate Programs) admission, constituted under the provisions of Ordinances and consisting of the Dean or his nominee. Admission shall be made in accordance with these ordinances and the rules made there under.



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

A. Eligibility:

1. The candidate seeking admission to Career Oriented Short-Term Course must be completed 10+2 from any recognized board/Institute in any stream. B. Intake & Reservations:
2. The intake to Career Oriented Short-Term Course shall be 30. The reservation in admission shall be as per rules.
3. Reservations:
 - 3.1. SC Candidates 15 % of the intake ST Candidates 7.5% of the intake PC Candidates 3% of the intake (on horizontal reservation basis) OBC Candidates 27% of the intake
 - 3.2. The candidates seeking admission under the above categories must fulfill the minimum eligibility conditions and qualifying requirements.
 - 3.3. The SC/ ST/OBC candidates must enclose attested copy of the caste certificate along with their Application Form stating that the candidate belongs to SC/ST/OBC Category.
 - 3.4. The following are empowered to issue SC/ST/OBC Certificates:
 - 3.4.1. District magistrate/ Additional District Magistrate/ Collector/ Deputy Commissioner/ Addl. Deputy Commissioner/Deputy Collector /1st Class Stipendiary Magistrate/City Magistrate/Sub Divisional magistrate/ Taluka Magistrate/ Executive Magistrate /Extra Assistant Commissioner.
 - 3.4.2. Chief Presidency Magistrate/ Addl. Chief Presidency Magistrate/ Presidency Magistrate. (iii) Revenue Officer not below the rank of Tehsildar. (iv) Sub- Divisional Officer of the area where the candidate and/or his family normally resides. (v) Administrator/Secretary to the Administrator/ Development Officer (Lakshadweep Islands). (vi) Candidate must note that certificate from any other person/authority shall not be accepted in any case.
 - 3.4.3. 3% seats on horizontal reservation basis shall be reserved for Physically Challenged Candidates (i) 1% for Visually Impaired (ii) 1% for Hearing Impaired (iii) 1% for Orthopedically Handicapped. In case no candidate is available in any of the above three sub-categories, the unfilled seats shall be filled by the candidates belonging to the remaining sub-categories.
 - 3.5. A candidate applying under PC category must attach a certificate by CMO, District Hospital.
 - 3.6. However, he/she will be considered under PC category only after verification from the University Medical Board. Admit cards for admission shall be issued to such candidates only on production of the above-mentioned verification certificates from the Medical Board constituted by the University for the purpose.
 - 3.7. Separate final merit list will be prepared for the candidates under each of the above categories.
 - 3.8. Vacant seats, if any, may be filled up as per rules.

B. Course Fee:

1. The Program will run as a Short Term Course of Study as prescribed under the Career Oriented Short Term Course (Certificate Programs) of Rama University Uttar Pradesh, Kanpur.
2. The Short Term Course fee may vary as per the course.

II. ADMISSION PROCEDURE

1. Admission to Career Oriented Short Term Course (Certificate Programs) shall be made in order of merit.
2. The admission process may be reviewed as per need from time to time.



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

III. CONDUCT OF THE COURSE

1. To qualify for the Career Oriented Short Term Course (Certificate Programs), the candidate must submit the assignments/projects as contained in the Course structure / syllabus detailed herein after.
2. The students shall be permitted to simultaneously pursue any one of the proposed program at a time along with their regular diploma/degree program.

IV. ATTENDANCE RULES

1. A student is required to have full, i.e., 100%, attendance and exemption up to 25% can be considered for specific cogent reasons. Out of this 25%, only 10% exemption will be permitted without taking any application from the student. Rest 15% exemption may be given by the Dean. The cogent reasons for exemption are given below:
 - 1.1. Participation in NCC/NSC/NSS Camps duly supported by certificate.
 - 1.2. Participation in University or College Team Games or Interstate or Inter University tournaments, duly supported by certificate from the Secretary of the University Sports
 - 1.5. Prolonged illness duly certified by the Medical Officer or the Superintendent, Rama Hospital, Rama University or any other Registered Medical Practitioner, provided such certificate is submitted to the Dean, Faculty of Engineering and Technology in time.
 - 1.6. No relaxation beyond 25% shall be considered in any case.
2. The attendance of a newly admitted candidate shall be counted from the date of his/her admission, or date of beginning of classes whichever is later, while in the case of promoted candidates, attendance shall be counted from the date on which respective class begins.
3. There shall be an Attendance Monitoring Committee in the Faculty under the Chairmanship of the Dean.



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

Part: 2

**Course Detail Career Oriented Short-Term
Courses**



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

I. COURSE STRUCTURE AND EVALUATION:

Candidates for the Career Oriented Short-Term Course (Certificate Programs) shall be evaluated on the basis of Assignments/Projects in accordance with the syllabi or course prescribed in the Ordinance.

A. Course Structure

The Career Oriented Short-Term Course (Certificate Programs) duration may vary on the basis course category. A student is required to complete the syllabus offer Certificate Program as per the details given below.

B. Course Syllabus:

Wind Energy and its Application in Power Generation

Here are a few things you must know about the course that will help you understand the relevance and admission-related details about the course.

ABOUT THE COURSE:

The objective of the course is to give the participants experience with applying the established engineering knowledge to specific wind turbine problems. In relation to this, the participants will learn about analyzing advantages, problems and principles in power obtained from wind energy. They will be able to understand wind as an energy source and a dynamic load source for the wind turbine, understand how power and load are transferred through the construction and understand how the individual components interact

ELIGIBILITY:

- Any Diploma or Bachelor Degree or M. Tech of any branch and studying in any year. Although its preferable to have students of final year as they will be benefitted maximum.

COURSEWARE:

- Course material is provided in printed / electronic form.

MODE:

- Online Lecture and Practice.

EVALUATION SYSTEM:

- Based on the Assignments and Final project report.



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

EMPLOYMENT OPPORTUNITY:

Significant proportion of the direct wind energy employment (around 75 per cent) is in three countries, Denmark, Germany and Spain, whose combined installed capacity adds up to 70 per cent of the total in the EU. Nevertheless, the sector is less concentrated now than it was in 2003, when these three countries accounted for 89 per cent of the employment and 84 per cent of the EU installed capacity. This is due to the opening of manufacturing and operation centres in emerging markets and to the local nature of many wind-related activities, such as promotion, O&M, engineering and legal services.

Germany (BMU 2006 and 2008) is the country where most wind-related jobs have been created, with around 38,000 directly attributable to wind energy companies and a slightly higher amount from indirect effects. According to the German Federal Ministry of the Environment, in 2007 over 80 per cent of the value chain in the German wind energy sector was exported.

In Spain (AEE, 2007), direct employment is slightly over 20,781 people. When indirect jobs are taken into account, the figure goes up to 37,730. According to the AEE, 30 per cent of the jobs are in manufacturing companies; 34 per cent in installation, O&M and repair companies, 27 per cent in promotion and engineering companies and 9 per cent in other branches.

Denmark (DWIA, 2008) has around 23,500 employees in wind turbine and blade manufacturing and major sub-component corporations. When indirect jobs are taken into account, the number goes up to 23,500.

As many as 1 million FTE jobs could be created if India achieves its target of 100 GW of solar energy by 2022. Approximately 183,500 FTE jobs would be generated if India installed 60 GW of wind energy by 2022. Availability of job creation numbers can guide policy decisions as the framework is developed for how India will achieve targets through its Solar and Wind Missions.

TARGET AUDIENCE

Key Management personnel who are involved in

- o Research & Development,
- o Engineering,
- o Quality,
- o Product Design,
- o Process Design,
- o And New Product Development



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No. 1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

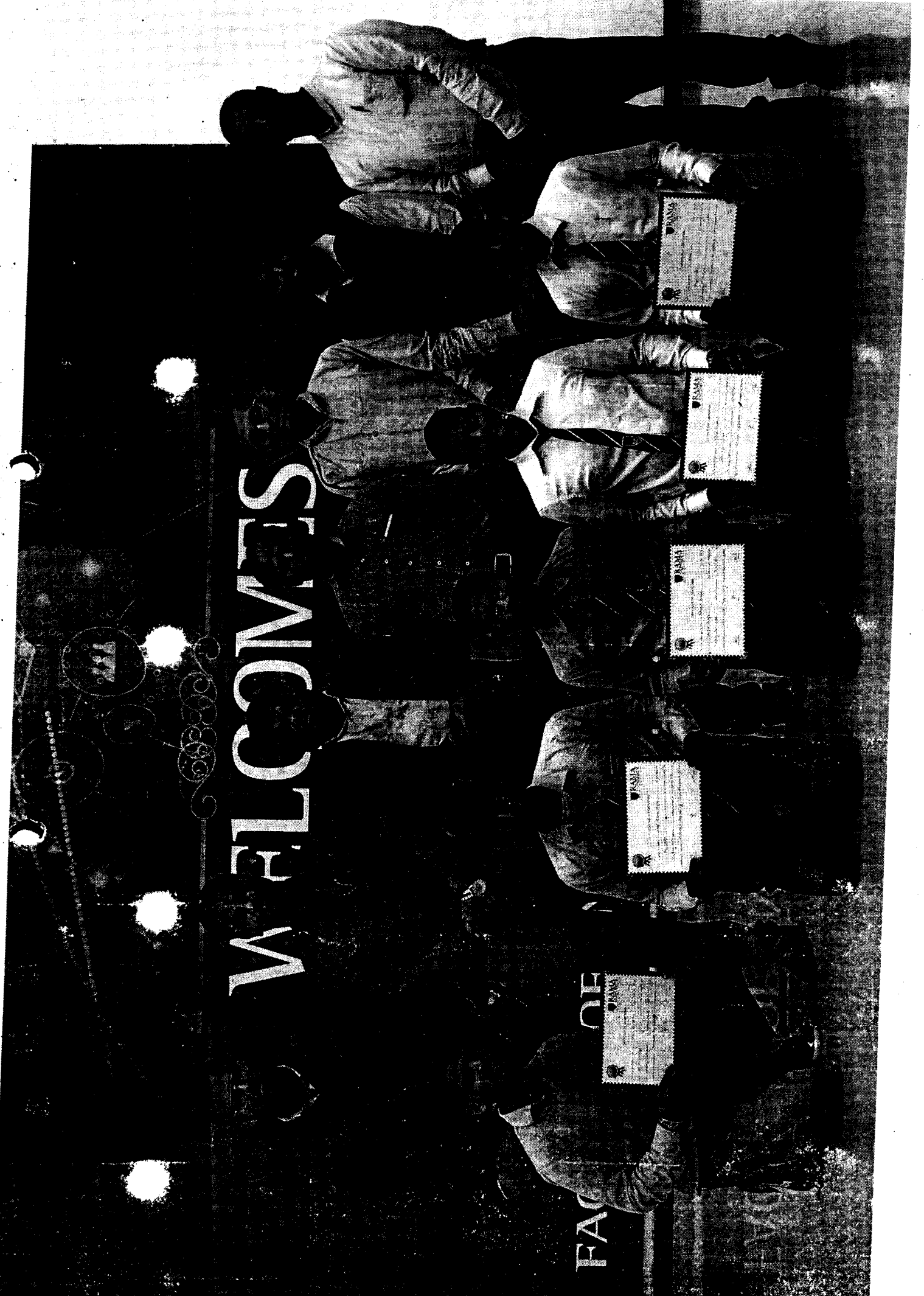
COURSE CONTENT

- 1. Basic Fundamentals**
 - a. Define Basic terms and definitions
 - b. Know how the wind generates
 - c. Explore the methods to extract energy from winds using various types of device
 - d. Explain the detailed theory involved in harnessing wind energy
 - e. Explain components of wind energy generation system
- 2. Design concept**
 - a. Explain design of blades, shaft and other components
 - b. Selection of bearing and other components
 - c. Selection of site suitability for sitting of turbine
- 3. Fabrication and Assembling**
 - a. Fabrication of Blades
 - b. Fabrication of support structure
 - c. Assembling of wind turbine components
- 4. Testing**
 - a. Testing of turbine under different site conditions
 - b. Record the results for future analysis

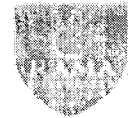
WELCOMES

FAC

OF



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RAMA
UNIVERSITY

CERTIFICATE OF SHORT TERM COURSE

This is to certify that

Mr. Mr. Shobhit Kumar

has successfully completed more than 30 hours short term course

in Wind Energy and its Application in Power Generation

conducted from 25.10.2019 to 30.11.2019 in the Department

of Dept. of Mechanical Engg. Faculty of Engineering & Technology


Dean Engineering


Registrar