



**DEPARTMENT OF APPLIED ENGINEERING**

**Minutes of Board of Studies Meeting for M.Tech Farm Machinery**  
**held on 20/04/2017**

The following BoS members were present while finalizing the structure of M. Tech in Farm Machinery held on 20/04/2017 in U-Block Fourth floor at AFTF 05 from 02:00 to 05:00pm.

**External Members:**

<b>S. no</b>	<b>Name</b>	<b>Details</b>
1	Dr.V. K. Tewari	Prof & Head, Ag & Food Engineering Department, IIT Kharagpur (External member)
2	Dr. A. Mani	Associate Professor, College of Agricultural Engineering, Bapatla – 522 101, Guntur Dist, Acharya NG Ranga Agricultural University, Email id: <a href="mailto:caebpt@gmail.com">caebpt@gmail.com</a> M: 99896 25205
3	Dr. Shaji James P.	Professor, Department of Farm Power, Machinery and Energy, KCAET, Kerala Agricultural University, Email Id: <a href="mailto:shajijames.p@kau.in">shajijames.p@kau.in</a> M: 9447924629

**Internal Members:**

S no	Name	Details
1	Dr. D. Vinay Kumar	Asst. Prof & Head, Chairman of BoS Vignan's Foundation for Science, Technology & Research University, Vadlamudi
2	Dr. Edwin B	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi
3	Mr. Aminul	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi
4	Ms. K. Rajkumar	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi
5	Mr. Syamsundar	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi

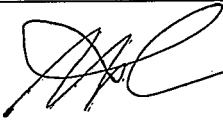


**The following were the discussions of the meeting:**

- Edwin B, PG – Coordinator addressed the meeting about the procedure followed while framing new curriculum and changes incorporated in proposed R17 Curriculum with the 30% of revision.
- Edwin B informed the members that the feedback from wide array of stakeholders are carefully collected, analyzed and their suggestions are taken into account while designing the Curriculum
- PG – Coordinator also addressed that the Choice Based Credit System (CBCS) is implemented in the curriculum as practiced in the past.
- Edwin B addressed that major restructuring has taken place in the curriculum and the structure is shown in Appendix-I
- Advanced Internal Combustion Engines and Computer Aided Design are restructured and offered as Computer Aided Manufacturing with more emphasis on case based real time scenarios as per suggestions from stakeholder's such as faculty, students,



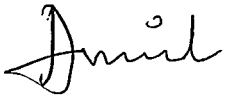


employers and parents.

- Courses such as Employment Orientation Program (EOP) and Research Methodology are offered in R17 M.Tech.
- All the Courses in the Curriculum are designed to fall under either of the domains of employability or entrepreneurship or skill development (Appendix-II).
- Inclusion of new courses in the curriculum is reviewed and is provided as Appendix-III.

**External Members:**

S. no	Name	Details	Signature
1	Dr.V. K. Tewari	Prof & Head, Ag & Food Engg Department, IIT Kharagpur (External member)	
2	Dr. A. Mani	Associate Professor, College of Agricultural Engineering, Bapatla – 522 101, Guntur Dist., Acharya NG Ranga Agricultural University, Email id: <a href="mailto:caebpt@gmail.com">caebpt@gmail.com</a> M: 99896 25205	
3	Dr. Shaji James P.	Professor, Dept .of Farm Power, Machinery and Energy, KCAET, Kerala Agricultural University, Email Id: <a href="mailto:shajijames.p@kau.in">shajijames.p@kau.in</a> M: 9447924629	

**Internal Members:**

S no	Name	Details	Signature
1	Dr. D. Vinay Kumar	Asst Prof, & Head Applied Engg Dept. VFSTRU (Internal Member)	
2	Dr. Edwin B	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi	
3	Mr. Aminul	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi	
4	Ms. K. Rajkumar	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi	
5	Mr. Syamsundar	Asst. Prof, Vignan's Foundation for Science, Technology & Research, University, Vadlamudi	

## Appendix-I

### I Year I Semester

Course Title	L	T	P	C
Design of Farm Machinery Systems	2	1	3	5
Tractor Systems Design	2	1	3	5
Alternative Energy Sources	3	1	2	5
Computer Aided Design and Manufacturing	3	1	3	4

### I Year II Semester

Course Title	L	T	P	C
Research Methods	3	-	-	3
Employment Orientation Program(EOP)	2	-	-	2
Soil Dynamics in Tillage and Traction	4	1	3	5
Ergonomics in Agro Systems	3	1	3	5
Testing of Tractors and Agricultural Machinery	4	-	3	5
Credit Seminar	-	-	3	2

### II Year I & II Semester

Course Title	L	T	P	C
I Semester				
Project/ Internship Phase – I			30	15
II Semester				
Project/ Internship Phase – II			30	15

## Department Electives

Course Title	L	T	P	C
Machinery Systems for Precision Agriculture	3	1	-	4
Instrumentation and Research Techniques	3	1	-	4
Production Technology for Machinery Components	3	1	-	4
Agro-Energy Audit and Management	3	1	-	4
Land Grading and Earth Moving Machinery	3	1	-	4
Optimization Techniques	3	1	-	4
Introduction to Intellectual Property Law	3	1	-	4
Simulation Modeling in Farm Machinery and Power Engineering	3	1	-	4
Advances in Hydraulics and Electro Pneumatics Controls	3	1	-	4
Advanced Internal Combustion Engines	3	1	-	4
Energy Conservation and Management in Farm Machinery and Power Engineering	3	1	-	4
Mechanical Vibrations	3	1	-	4



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## Appendix-II

List of Courses that enable Employability or Entrepreneurship or Skill development in the R17 M.Tech- FARM MACHINERY (Agriculture Engineering)

Year	Course Name	Course Nature
I	Design of Farm Power Machinery System	Employability
I	Tractor Systems Design	Skill development
I	Alternative Energy Design	Employability
I	Computer Aided Design and Manufacturing	Skill development
I	Research Methods	Skill development
I	Employment Orientation Program (EOP)	Employability
I	Soil dynamics in Tillage and Traction	Employability
I	Ergonomics in Agro Systems	Skill development
I	Testing of Tractors and Agricultural Machinery	Skill development
I	Credit Seminar	Skill development
II	Project/ Internship Phase – I	Skill development
II	Project/ Internship Phase – II	Skill development
E	Machinery Systems for Precision Agriculture	Employability
E	Instrumentation and Research Techniques	Skill development
E	Production Technology for Machinery Components	Skill development
E	Agro-Energy Audit and Management	Entrepreneurship
E	Land Grading and Earth Moving Machinery	Employability
E	Optimization Techniques	Employability
E	Introduction to Intellectual Property Law	Employability
E	Simulation Modeling in Farm Machinery and Power Engineering	Employability
E	Advances in Hydraulics and Electro Pneumatics Controls	Employability
E	Advanced Internal Combustion Engines	Employability
E	Energy Conservation and Management in Farm Machinery and Power Engineering	Entrepreneurship
E	Mechanical Vibrations	Employability



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### Appendix –III

#### List of New Courses in the R-17 M.Tech- FARM MACHINERY (Agriculture Engineering)

S.No	Semester (Year)	Course Name
1	I-Year- I SEMESTER	Design of Farm Power Machinery System
2	I-Y E A R- I SEMESTER	Tractor Systems Design
3	I-Y E A R- I SEMESTER	Alternative Energy Design
4	I-Y E A R- I SEMESTER	Computer Aided Design and
5	I-Y E A R- II SEMESTER	Research Methods
6	I-Y E A R- II SEMESTER	Employment Orientation Program (EOP)
7	I-Y E A R- II SEMESTER	Soil dynamics in Tillage and Traction
8	I-Y E A R- II SEMESTER	Ergonomics in Agro Systems
9	I-Y E A R- II SEMESTER	Testing of Tractors and Agricultural Machinery
10	I-Y E A R- II SEMESTER	Credit Seminar
11	II-Y E A R- I SEMESTER	Project/ Internship Phase - I
12	II-Y E A R- II SEMESTER	Project/ Internship Phase –II
13	Department Elective	Machinery Systems for Precision Agriculture
14	Department Elective	Instrumentation and Research Techniques
15	Department Elective	Production Technology for Machinery Components
16	Department Elective	Agro-Energy Audit and Management
17	Department Elective	Land Grading and Earth Moving Machinery
18	Department Elective	Optimization Techniques
19	Department Elective	Introduction to Intellectual Property Law
20	Department Elective	Simulation Modeling in Farm Machinery and Power Engineering
21	Department Elective	Advances in Hydraulics and Electro Pneumatics Controls
22	Department Elective	Advanced Internal Combustion Engines
23	Department Elective	Energy Conservation and Management in Farm Machinery and Power Engineering
24	Department Elective	Mechanical Vibrations



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