GokarajuRangaraju Institute of Engineering and Technology

(Autonomous)

GRIET/ME/BOS/1E/G/18-19

30 June 2018

Minutes of Meeting

For

B. Tech Mechanical Engineering

(I and II Semesters)

(For students admitted from 2018-19 as per GR18 Regulations)

Board of Studies

Held on 30 June 2018

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Autonomous Institute under JNTU Hyderabad)

Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I,II, III and IV year B. Tech (I and II semesters) Mechanical Engineering of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous), Hyderabad, held on 30-06-2018 in the chamber of Seminar Hall of ME, GRIET at 9.30AM.

Members Present:

Dr. R Raman Goud
Professor of ME,
GRIET, Hyderabad. — Chairman — 30/6/2018

Dr.L. Jaya Hari,
Professor & HOD of ME,
GRIET, Hyderabad. — Member & Alumni Staff — 30/6/18

Mr K Uma Maheswara Rao,
Director, Intergraph
Hyderabad. — Member (Industry Expert)

Dr. K G K Murti
Professor, ME Dept, IARAE,
Hyderabad. — K G K Murti 30/6/2018 — Member (External Expert)

Dr. A Chenna Kesava Reddy
Professor of ME,
JNTU, Hyderabad. — 26/07/2018 — Member (External Expert)

Dr. A. Chenna Kesava Reddy
Professor & Director
Directorate of University Foreign Relations
JNT University Hyderabad
Kukatpally, Hyderabad-500085, Telangana State

Mr. Raju Nimmala
Asst.Manager, Midhani Manufacturing Industries Limited, Member (Industry Expert)
Midhani, Hyderabad.

S Kasi Raju,
Design Engineer, R&D, Intergraph,
Hyderabad. — Member (Alumni & Industry Expert)

Dr. Swadesh Kumar Singh Professor of ME, GRIET, Hyderabad.	Member	
Dr. N Sateesh, Professor of ME, GRIET, Hyderabad.	Member	
Dr R Karthikeyan Professor of ME, GRIET, Hyderabad.	Member	
Dr K Venkateswarlu Professor of ME, GRIET, Hyderabad.	Member	
Prof. B Ch Nookaraju Assoc. Professor of ME, GRIET, Bachupally, Hyderabad.	Member	
Anugu Deepthi IV year B.Tech. ME	Student Member	
Dr.V Mallikarjuna Reddy, Professor of CE, GRIET, Hyderabad.	Co-opted member	

Item1. Course structure, Syllabus subject to be approved by the Academic Council is confirmed for I,II,III and IVB. Tech (I and II Semesters) Mechanical Engineering. Subjects of BS, HSS and EAS as confirmed by BOS of respective subjects are accepted.

Item2. Evaluation Scheme suggested as per GR18 to be adopted.

Item3. Panel of Examiners are suggested.

Item4. Existing practices to be strengthened and confirmed.

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous)
Department of Mechanical Engineering

Board of Studies

Minutes of Meeting

The members of Board of Studies during the meeting held on 30-06-2018, in the Department of Mechanical Engineering, after having discuss thoroughly, concluded the following recommendations for I, II, III IV Year of I and II Semester GR18 Syllabus and the following modifications were suggested and implemented.

B. Tech ME: GR18

II YEAR Curriculum:

Changes made for curriculum improvement:

I SEM

- **Introduction to Electromagnetic Theory** course is introduced in II year I semester to impart the knowledge in electromagnetic field.
- **Material Engineering** course replaced by materials science and metallurgy and is introduced in II year I semester, which also includes new topics like Alloy of steels, interstitial solid solutions.
- **Basic Electrical and Electronics Engineering** course is introduced in II year I semester and the course name changed from Basic Electrical Engineering to Basic Electrical and Electronics Engineering. The course content includes electronics topics such as Diodes, Transistors which is useful to current electronic industrial needs.
- **Material Sciences & Metallurgical Lab** course is introduced in II year I semester and new experiments like finding of microstructure of Titanium alloys are included.

II SEM

- **Manufacturing Processes** course is introduced in II year II semester to enhance the knowledge in new topics like additive manufacturing.

HOD/ME

- **Manufacturing Processes Lab** course is introduced in II year II semester to enhance the knowledge in new topics like additive manufacturing.

III YEAR Curriculum:

I SEM

- **Manufacturing Technology** course is introduced in III year I semester which consist of new contents Just in Time, Queuing theory which are useful in improving the production.
- **Manufacturing Technology Lab** course is introduced in III year I semester which consist of new contents Just in Time, Queuing theory which are useful in improving the production.

19/6/2018

BOS Chairman

Dr R Raman Goud
Professor & BOS Chairman
Department of Mechanical Engineering
Gokaraju Rangaraju Institute of Engineering ...

GokarajuRangaraju Institute of Engineering and Technology

(Autonomous)

GRIET/ME/DFM/BOS/1E/G/18-19

30 June 2018

Minutes of Meeting

For

M. Tech Design for Manufacturing

(I and II Semesters)

(For students admitted from 2018-19 as per GR18 Regulations)

Board of Studies

Held on 30 June 2018

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Autonomous Institute under JNTU Hyderabad)

Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II year M. Tech (I and II semesters) Design for Manufacturing under the faculty of Mechanical Engineering of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous), Hyderabad, held on 30-06-2018 in the chamber of Seminar Hall of ME department, GRIET at 2.00 PM.

Members Present:

Dr. R Raman Goud Professor of ME, GRIET, Hyderabad.	Chairman
Dr.L. Jayahari, Professor & HOD of ME, GRIET, Hyderabad.	Member & Alumni Staff
Mr K Uma Maheswara Rao, Director, Intergraph Hyderabad.	Member (Industry Expert)
Dr. K G K Murti Professor, ME Dept, IARAE, Hyderabad.	Member (External Expert)
Dr. A Chenna Kesava Reddy Professor of ME, JNTU, Hyderabad.	Member (JNTUH Nominee)
Mr. Raju Nimmala Asst.Manager, Midhani Manufacturing Industries Limited, Midhani, Hyderabad.	Member (Industry Expert)
S Kasi Raju, Design Engineer, R&D, Intergraph, Hyderabad.	Member (Alumni & Industry Expert)

Dr. A. Chenna Kesava Reddy
Professor & Director
Directorate of University Foreign Relations
JNT University Hyderabad
Kukatpally, Hyderabad-500085, Telangana State.

Dr. Swadesh Kumar Singh Professor of ME, GRIET, Hyderabad.	Member	
Dr. N Sateesh, Professor of ME, GRIET, Hyderabad.	Member	
Dr R Karthikeyan Professor of ME, GRIET, Hyderabad.	Member	
Dr K Venkateswarlu Professor of ME, GRIET, Hyderabad.	Member	
Prof. B Ch Nookaraju Assoc. Professor of ME, GRIET, Bachupally, Hyderabad.	Member	
Mr B Ramesh, II year M.Tech. DFM	Student Member	
Dr.V Mallikarjuna Reddy, Professor of CE, GRIET, Hyderabad.	Co-opted member	

Item1. Course structure, Syllabus subject to be approved by the Academic Council is confirmed for I and II year M. Tech (I and II Semesters) Design for Manufacturing under the faculty of Mechanical Engineering. Subjects of BS, HSS and EAS as confirmed by BOS of respective subjects are accepted.

Item2. Evaluation Scheme suggested as per GR18 to be adopted.

Item3. Panel of Examiners are suggested.

Item4. Existing practices to be strengthened and confirmed.

HOD/ME

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECGNOLOGYHYDERABAD

DEPARTMENT OF MECHANICAL ENGINEERING

Minutes of Meeting of Board of Studies

The members of board of studies during the meeting held on 30.6.2018,for M Tech Design for Manufacturing in the Department of Mechanical Engineering, after having discussed thoroughly, concluded the following recommendations for I and II year of I and II semester GR18 syllabus and the following modifications were suggested and implemented.

Regulation	New courses Introduced	Number of new courses Introduced
GR 18	**I YEAR I Sem**	
	Advanced Manugacturing Process	5
	Material Characterization techniques	
	Advanced Manufacturing Process Lab	
	Research Methodology and IPR	
	Audit Course 1	
	I YEAR II SEM	
	Design for Manufacturing and Assembly	7
	Flexible Manufacturing System	
	Production and operation management	
	Sustainable Manufacturing	
	Tool Design Lab	
	Audit course II	
	Mini Project	
	II YEAR I SEM	
	Advanced Metal forming	2
	Optimization techniques	
	Open Elective	
	Business Analytics	5
	Industrial Safety	
	Cost Management of Engg Project	
	Composite material	
	Waste to Energy	

Dr R Raman Goud

BOS Chairman

Dr R Raman Goud
Professor & BOS Chairman
Department of Mechanical Engineering
Gokaraju Rangaraju Institute of Engineering and Technology

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous)
Department of Mechanical Engineering

Board of Studies

Minutes of Meeting

The members of Board of Studies during the meeting held on 30-06-2018, for M Tech Design for Manufacturing in the Department of Mechanical Engineering, after having discussions thoroughly, concluded the following recommendations for I and II Year of I and II Semester GR18 Syllabus and the following modifications were suggested and implemented

M. Tech (DFM): GR18

I YEAR Curriculum:

Changes made for curriculum improvement:

- **Advanced Manufacturing Process** course is introduced in I Year I semester to study various manufacturing processes and different operations on various machines.
- **Material Characterization Techniques** course is introduced I Year I semester to study the mechanical properties of various materials by using standard testing procedures.
- **Advanced Manufacturing Process Lab** course is introduced I Year I semester to practice various machining operations on machines.
- **Research Methodology and IPR** course is introduced in I Year I semester to understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.
- **English for Research Paper Writing** course is chosen as **audit course-I** in I Year I semester to enhance the research paper writing skills.
- **Design for Manufacturing and Assembly** course is introduced in I year II semester to consider the various design parameters for successful design and manufacturing.
- **Flexible Manufacturing System** course is introduced in I year II semester to enhance the knowledge levels in automation to higher order like transfer lines etc.

HOD/ME

- **Production and Operation Management** course is introduced to organize production systems and its scheduling which is introduced in the I year II semester.
- **Sustainable Manufacturing** course is introduced in the I year II semester.to incorporate economic, environmental, and social aspects in Manufacturing processes.
- **Tool Design Lab** course is introduced in the I year II semester to acquire the knowledge on various Cutting tools and its influences on machining processes.
- **Pedagogy** taken as an audit course I year II, which is the study of how knowledge and skills are imparted in an educational context, and it considers the interactions that take place during learning, which is introduced in the I year II semester.
- **Mini Project** course is introduced in the I year II semester to understand the engineering concepts by preparing Prototype models.

II Year – Curriculum

Changes made for curriculum improvement:

- **Advanced Metal Forming** course is introduced in the II year I semester to acquire the knowledge on various forming methods and its impact on machining processes
- **Optimization Techniques** course is introduced as an elective in II year I semester to know the various optimization techniques in manufacturing processes, inventory and queuing.
- **Business Analytics** course is introduced in II year I semester as open elective to formulate decision analysis and summarize recent trends in business intelligence,
- **Industrial safety** course is introduced in II year I semester as open elective to safeguard the workers in the industrial environment,
- **Cost management of engineering projects** course is introduced in II year I semester as open elective for engineering project to analyze and predict the cost of the various engineering projects
- **Composite material** course is introduced in II year I semester as open elective to enhance the knowledge in creating new kind of materials

HOD/ME

- **Waste to energy** course is introduced in II year I semester as open elective to become capable of analyze and design of energy conversion system.

BOS Chairman

Dr R Raman Goud
Professor & BOS Chairman
Department of Mechanical Engineering
Gokaraju Rangaraju Institute of Engineering and Technology

GokarajuRangaraju Institute of Engineering and Technology

(Autonomous)

GRIET/ME/TE/BOS/1E/G/18-19

30 June 2018

Minutes of Meeting

For

M. Tech Thermal Engineering

(I and II Semesters)

(For students admitted from 2018-19 as per GR18 Regulations)

Board of Studies

Held on 30 June 2018

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Autonomous Institute under JNTU Hyderabad)

Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II year M. Tech (I and II semesters) Thermal Engineering under the faculty of Mechanical Engineering of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous), Hyderabad, held on 30-06-2018 in the chamber of Seminar Hall of ME department, GRIET at 2.00 PM.

Members Present:

Dr. R Raman Goud
Professor of ME,
GRIET, Hyderabad. — Chairman

Dr.L. Jaya Hari,
Professor & HOD of ME,
GRIET, Hyderabad. — Member & Alumni Staff

Mr K Uma Maheswara Rao,
Director, Intergraph
Hyderabad. — Member (Industry Expert)

Dr. K G K Murti
Professor, ME Dept, IARAE,
Hyderabad. — Member (External Expert)

Dr. A Chenna Kesava Reddy
Professor of ME,
JNTU, Hyderabad. — Member (JNTUH Nominee)

Dr. A. Chennakesava Reddy
Professor & Director
Directorate of University Foreign Relations
JNT University Hyderabad
Kukatpally, Hyderabad-500085, Telangana State

Mr. Raju Nimmala
Asst.Manager, Midhani Manufacturing Industries Limited, Member (Industry Expert)
Midhani, Hyderabad.

S Kasi Raju,
Design Engineer, R&D, Intergraph,
Hyderabad. — Member (Alumni & Industry Expert)

Dr. Swadesh Kumar Singh Professor of ME, GRIET, Hyderabad.	Member	
Dr. N Sateesh, Professor of ME, GRIET, Hyderabad.	Member	
Dr R Karthikeyan Professor of ME, GRIET, Hyderabad.	Member	
Dr K Venkateswarlu Professor of ME, GRIET, Hyderabad.	Member	
Prof. B Ch Nookaraju Assoc. Professor of ME, GRIET, Bachupally, Hyderabad.	Member	
Mr. V Raju, II year M.Tech. TE	Student Member	
Dr.V Mallikarjuna Reddy, Professor of CE, GRIET, Hyderabad.	Co-opted member	

Item1. Course structure, Syllabus subject to be approved by the Academic Council is confirmed for I and II year M. Tech (I and II Semesters) Thermal Engineering under the faculty of Mechanical Engineering. Subjects of BS, HSS and EAS as confirmed by BOS of respective subjects are accepted.

Item2. Evaluation Scheme suggested as per GR18 to be adopted.

Item3. Panel of Examiners are suggested.

Item4. Existing practices to be strengthened and confirmed.

HOD/ME

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECGNOLOGYHYDERABAD

DEPARTMENT OF MECHANICAL ENGINEERING

Minutes of Meeting of Board of Studies

The members of board of studies during the meeting held on 30.6.2018, for M Tech Thermal Engineering in the Department of Mechanical Engineering, after having discussed thoroughly, concluded the following recommendations for I and II year of I and II semester GR18 syllabus and the following modifications were suggested and implemented.

Regulation	New courses Introduced	Number of new courses
GR18	**Sem-I**	
	Thermal and Combustion	2
	Advanced Fluid Dynamics	
	Elective -I	
	Nulear Engg	3
	Energy Conservation and Mangement	
	Micro/Nano Scale HT	
	Elective -II	
	A/C System Design	
	Gas Turbines	
	Theory of heat pipes	5
	TE lab Practice-II	
	Research Methodology and IPR	
	SEM-II	
	Advance Heat transfer	2
	Steam Engg	
	Elective -III	
	Referigation and Cryogenics	
	Design of Heat Exchangers	3
	Convetional Heat transfer	
	Elective -IV	
	TE lab III and IV	
	Audit II	2

Dr R Raman Goud

BOS Chairman

Dr R Raman Goud
Professor & BOS Chairman
Department of Mechanical Engineering
Gokaraju Rangaraju Institute of Engineering and Technology

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Autonomous)

Department of Mechanical Engineering

Board of Studies

Minutes of Meeting

The members of Board of Studies during the meeting held on 30-06-2018 for M Tech Thermal Engineering in the Department of Mechanical Engineering, after having discussions thoroughly, concluded the following recommendations for I and II Year of I and II Semester GR18 Syllabus and the following modifications were suggested and implemented

M. Tech (TE): GR18

I YEAR Curriculum:

Changes made for curriculum improvement:

Semester-I

- **Thermal and Combustion** course is introduced in I year I semester to demonstrate the knowledge of energy, basic laws governing energy conversion in multi component systems and application of chemical thermodynamics.
- **Advanced Fluid Dynamics** course is introduced in I year I semester to solve the fluid flow problems of industrial base.

Elective-I

- **Nuclear Engineering** course is introduced in I year I semester to understand the basic concepts like nuclear fission, neutron production, scattering, diffusion, slowing down and absorption.
- **Energy Conservation and Management** course is introduced in I year I semester to gain knowledge of this course, student should generate scenarios of energy consumption and predict the future trend.
- **Micro/Nano Scale Heat Transfer** course is introduced in I year I semester to gain knowledge of this course student should generate scenarios of energy consumption and predict the future trend.

Elective-II

- **A/C System Design** course is introduced in I year I semester to students to examine the principles and practice of thermal comfort conditions and analyze the principles of ventilation and practice the requirements of ventilation.

HOD/ME

- **Gas Turbines** course is introduced in I year I semester to enhance the knowledge and applicability of a given propeller system for a given aircraft.
- **Theory of Heat Pipes** course is introduced in I year I semester to imbibe the knowledge extracting the heat from pipes. This knowledge is useful to design of electronic components.
- **TE Lab Practice-II** course is introduced in I year I semester includes new experiments like evaluate the performance of the vapor compression and air conditioning and multi stage reciprocating compressor units.
- **Research Methodology and IPR** course is introduced in I year I semester to understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

Semester-II

- **Advance Heat Transfer** his course is introduced in I year II semester includes new experiments like evaluate the performance of the vapor compression and air conditioning and multi stage reciprocating compressor units.
- **Steam Engineering** course is introduced in I year II semester includes contents like design a steam piping system, its components for a process and also design economical and effective insulation.

Elective-III

- **Refrigeration and Cryogenics** course is introduced in I year II semester includes contents like design a steam piping system, its components for a process and also design economical and effective insulation.
- **Design of Heat Exchangers** course is introduced in I year II semester offers to examine the Tinker's, kern's, and Bell Delaware's methods of shell and tube heat exchangers.
- **Convective Heat Transfer** course is introduced in I year II semester is useful to analyze the solution methodologies (similarity and integral methods) to solve for external and internal forced convective heat transfer.

Elective-IV

TE Lab - III course is introduced in I year II semester includes new experiments like compute the rate of heat transfer in different heat pipes

TE lab - IV course is introduced in I year II semester includes new experiments like compute the rate of heat transfer in different heat pipes.

BOS Chairman

Dr R Raman Goud
Professor & BOS Chairman
Department of Mechanical Engineering
Rajarajeshwari Institute of Engineering and Technology