# Department of Mechanical Engineering

MINUTES of 9th Meeting of the Board of studies held on 10th May, 2018 at 10.30 am

Venue: Conference Hall, National Engineering College, K.R. Nagar, Kovilpatti – 628 503

# Department of Mechanical Engineering

# National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

# 9th Board of studies Meeting in the Department of Mechanical Engineering

Venue: Conference Hall, National Engineering College, K.R.Nagar, Kovilpatti – 628 503

Date & Time: 10.05,2018 & 10.30 a.m.

#### AGENDA

BoS / MECH 9.1	4	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Mechanical Engineering
BoS / MECH 9.2		Confirmation of the Minutes of the 8th meeting of Board of studies in the department of Mechanical Engineering held on November 25, 2017 and Action taken report of 8th meeting of Board of studies
BoS / MECH 9.3	1	Business brought forward by the Chairman, Board of studies  9.3.1. Changing the evaluation scheme of the elective course 15ME38E-Advanced Modeling Techniques in UG- Curriculum R2015  9.3.2. Design of UG curriculum for R-2019
BoS / MECH 9.4	1	Suggestions given by the BOS Members
BoS / MECH 9.5	3	Any other items

## Department of Mechanical Engineering

## National Engineering College, K.R.Nagar, Kovilpatti - 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/ MECH

10th May, 2018

Dear Sir/Madam,

Sub: Minutes of the 9th Meeting of the Board of studies in the Mechanical Engineering - Reg.

Kindly find attached herewith the Minutes of the 9th Meeting of Board of studies of the Mechanical Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 10th May 2018 at 10.30 a.m. in Conference hall, National Engineering college, Hard copy of the Mihutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at hodmech@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

Dr.K.Kalidasa Muruga

# DEPARTMENT OF MECHANICAL ENGINEERING

#### MINUTES OF THE MEETING

The 9th Meeting of the Board of studies of the Mechanical Engineering was held on 10th May 2018 at 10.30 am in the Conference Hall, National Engineering College, K.R. Nagar, Kovilpatti – 628 503

1. The following members were present:

1.	Dr.K.Kalidasa Murgavel Prof & Head	Chairman	
2.	Dr. D.Ravindran, Professor		
3.	Dr.K.Manisekar, Professor		
4.	Dr.H.Kanagasabapathy, Professor		
5.	Dr.T.Vigraman, Asso. Prof. (SG)		
6.	Dr.S.Iyah Raja, Asso. Prof.		
7.	Dr.D.Venkat Kumar, Asso. Prof.		
8.	Dr. M.Kathiresan, Asso. Prof.	Internal	
9.	Dr. R.Harichandran, Asso. Prof.	Members	
10.	Mr.P.Ramanan, Asst. Prof. (SG)		
11.	Mr.F.Michael Thomas Rex, Asst. Prof. (SG)	<del>-</del>	
12.	Mr.M.Vivekanandan, Adjunct Faculty	-	
13.	Mr.S.S.Ananthan, Adjunct Faculty		
14.	Mr. S. Pandiaraj, Adjunct Faculty		
15.	Dr. R. Velraj Professor & Director, Institute for Energy Studies, CEG Anna University, Chennai	Academic Expert	
16.	Dr. K. Murugan Scientist –E, Centre for Sol-Gel Coatings, ARCI, Hyderabad, Telangana	Meritorious Alumnus Nominated by the Principal	
17.	Dr. A.Arockiarajan Associate Professor, Department of Applied Mechanics, Indian Institute of Technology, Chennai	Special Invitees	

18.	Dr. S.Rajendra Boopathy	
	Professor, Department of Mechanical Engg.	
	College of Engineering, Guindy	
	Anna University, Chennai	
19.	Mr. M. Kumaravendhan	
	General Manager-Projects	
	Sterlite Copper, Thoothukudi	
20.	M.Arun Kumar, Final year	
21.	A.Gurumoorthi, Final year	Student Members
22.	P.Vairapraveen, Final year	Members

2. The Academic expert member Dr. Ing. M. Duraiselvam, Associate Professor / Dept. of Production Engineering, National Institute of Technology, Trichy, University Nominee member Dr.R. Arularasan, Assistant Professor (SG), Department of Mechanical Engineering, University college of Engineering Arni, Industrial Expert members Dr. S. Venugopal, Former Director, Materials Group, IGCAR, Visiting Professor, Indian Institute of Technology, Chennai, Mr. Raju Sreeram N.D., Managing Director, Vijaya Lakshmi Mills Pvt. Ltd., Rajapalayam, Mr. S. Suresh, Vice President and Business Head (EM), Wheels India Limited, Padi, Chennai and Mr. R. Kanda Subburaj, Chief Engineer, Project Controls, AMEC Foster Wheeler India Pvt. Ltd., Chennai could not attend the meeting due to their prior commitments and unavoidable reasons and he was granted leave of absence.

BoS / MECH 9.1	÷	WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF MECHANICAL ENGINEERING
		The Chairman, BOS of the Mechanical Engineering welcomed and introduced the members of 9th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / MECH 9.2	1	TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING HELD ON 25th NOVEMBER, 2017

	The minutes of the Eighth Board of Studies meeting held on 25th November, 2017 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.  > Action Taken Report (Enclosed in Annexure I)
BoS / MECH 9.3.1	: TO CONFIRM AND APPROVE the End semester evaluation scheme of the elective course 15ME38E-Advanced Modeling Techniques in UG degree programme under R·2015
	<ul> <li>RESOLVED TO conduct the end semester examination for the elective course 15ME38E Advanced Modeling Techniques in CAD laboratory</li> <li>RESOLVED TO change the question pattern for the elective course 15ME38E Advanced Modeling Techniques from 'E' to 'A'</li> </ul>
BoS / MECH 9.3.2	: TO CONFIRM AND APPROVE the curriculum of UG degree programme to be offered under R-2019
	RESOLVED TO approve the curriculum of UG degree programme to be offered under R-2019
BoS / MECH 9.4	Suggestions Given by the Members
	Modification may be done in the regulation to evaluate the practical component of the integrated courses in the end semester evaluation based on the credit distribution.
	Weightage for the end semester examination and continuous internal assessment may be varied based on the nature of course.
	The fundamentals of Electrical and Electronics engineering may be combined and offered as a single course
	Metallurgy course must be designed to meet the need of mechanical engineering.
	Environmental engineering may be offered with occupational safety and health.
	Management skills must be inculcated though specific courses that are designed based on the industrial expectation.

The members had a brainstorming discussion and interaction among themselves. After discussion, fruitful suggestions were incorporated appropriately in the Curriculum and Syllabi.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

- a) Changing the question pattern for the elective course 15ME38E Advanced Modeling Techniques from 'E' to 'A' in R2015
- b) Conducting end semester examination for the elective course 15ME38E Advanced Modeling Techniques in CAD Laboratory.
  - The evaluation shall be based on the computer aided drawings which are printed in sheets. It is similar to the evaluation of Engineering Graphics based on manual drawings.
- c) The Curriculum of B.E. Mechanical Engineering Programme under Regulation 2019.

Dr.D.Ravindran thanked all the members for their kind cooperation and the meeting came to an end.

#### Members Present

Dr.K.Kalidāsa Murugavel Professor & Head	Center
Internal Members	
Dr. D.Ravindran, Professor	Rand
Dr.K.Manisekar, Professor	h.mor
Dr.H.Kanagasabapathy, Professor	B-4.
Dr.T.Vigraman, Asso. Professor (S.G)	FF
Dr.S.Iyahraja, Asso. Professor	Ton
Dr.D.Venkat Kumar, Asso. Professor	0.00
Dr. M.Kathiresan, Asso. Professor	Water of
Dr. R. Harichandran, Asso. Professor	R. K.

Mr.P.Ramanan, Assistant Professor (S.G)	Place.
Mr. F. Michael Thomas Rex, Assistant Professor (S.C	G) 14
Br.M.Vivekanandan, Adjunct Faculty	M-vivehaden
Mr.S.S.Ananthan, Adjunct Faculty	Domatia 49
Mr.S.Pandi∳araj, Adjunct Faculty	(5 hy
Academic Expert	DESCRIPTION OF THE PROPERTY OF
Dr. R. Velraj Professor & Director, Institute for Energy Studies, CEG, AnnaUniversity, Chennai—600025	R. Whin
Alumni Nominated by the Principal	
Dr. K. Murugan Scientist – K. Centre for Sol-Gel Coatings, ARCI Hyderabad – 500 005, Telangana	Myennen
Special Invitee	
Dr. A. Arockiarajan Professor, Department of Applied Mechanics, IIT Madras, Chennai – 600 036.	de ju
Dr. S.Rajendra Boopathy Professor, Department of Mechanical Engineering College of Engineering, Guindy Anna University, Chennai	1 Mario 18
M. Kumaravendhan General Manager-Projects Sterlite Copper Thoothukudi-628002	M. 40_
Student Members Nominated by the HOD	
M.Arun Kumar, Final year A.Gurumoorthi, Final year P.Vairapraveen, Final year	A. Owolloon h.  P. Vairapravier

CHAIRMAN BOARD OF STUDIES

#### ANNEXURE I

# Actions taken for Minutes of 8th BoS Meeting

As per BOS Committee suggestion,

- Application level Course outcome (CO) was added to the COs of the course "Thermal science".
- 2. CO2 of the course "Mechanics of Materials" was modified.
- Response surface methodology content was included in the elective course "Design of Experiments" offered in PG Programme (Energy Engineering).

CHAIRMAN BOARD OF STUDIES

MINUTES 9th Meeting of the Board of studies held on 21st April, 2018 at 10.00 AM

Venue: Conference Hall, National Engineering College, K.R.Nagar, Kovilpatti – 628 503

National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai)

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# National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution · Affiliated to Anna University, Chennai) www.nec.edu.in

# 9th Board of studies Meeting in the Department of Electronics and Communication Engineering

Venue: Conference Hall, National Engineering College K.R.Nagar, Kovilpatti – 628 503

Date & Time: 21.04.2018 & 10.00 a.m.

#### AGENDA

ECE/BoS 9.1	4.	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Electronics and Communication Engineering
ECE/BoS 9.2		Confirmation of the Minutes of the 8th meeting of Board of studies in the department of Electronics and Communication Engineering held on November 18, 2017 and action taken report of 8th meeting of Board of studies
ECE/BoS 9.3	±	Business brought forward by the Chairman, Board of studies  9.3.1. Curriculum for Regulation 2019 UG Degree  9.3.2. Curriculum modification for PG degree Programme under R·2015 (M.E Embedded System Technologies)
ECE/BoS 9.4	1	Any other items
ECE/BoS 9.5	:	Suggestions given by the BoS Members

## National Engineering College, K.R.Nagar, Kovilpatti - 628 503

(An Autonomous Institution · Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/Branch/ECE

23rd April, 2018

Dear Sir/Madam.

Sub: Minutes of the 9th Meeting of the Board of studies in Electronics and Communication Engineering - Reg.

Kindly find attached herewith the minutes of the 9th Meeting of Board of studies of the Electronics and Communication Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 21th April, 2018 at 10.00 AM in the conference hall of National Engineering college. Hard copy of the minutes is also being sent to you by speed post.

It is requested that comments on the minutes, if any, may please be sent by email to hodeceug@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the minutes shall be taken as confirmed.

Thanking You.

Yours Sincerely

(Dr.A.Shenbagavalli)

#### MINUTES OF THE MEETING

The 9th Meeting of the Board of studies of the Electronics and Communication Engineering was held on 21st April, 2018 at 10.00 AM in the Conference Hall of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503

## 1. The following members were present:

1	Dr.A.Shenbagavalli Professor & Head	Chairman	
2	Dr.V.Vijayarangan, Professor		
3	Dr.S.Tamilselvi, Prof & Head(PG)		
4	Mr.N.Arumugam, Asso.Prof.		
5	Mr.V.R.S.Mani, Asso. Prof.		
6	Mr.T.Vijayanandh, Asst. Prof. (SG)	1	
7	Mr.K.J.Prasanna Venkatesan, Asst. Prof. (SG)	Internal	
8	Mr. A.Saravana Selvan, Asst. Prof. (SG)	Members	
9	Mr.S.Cammillus, Asst. Prof. (SG)		
10	Ms.R.Manjula Devi, Asst. Prof. (SG)		
11	Dr.T.S.Arun Samuel, Asso. Prof.		
12	Mr.M.Satheesh Kumar, Asst. Prof.	1	
13	Dr. Rahilal Bilal, Associate Professor / Dept. of ECE Thanthai Periyar Government Institute of Technology, Vellore	University Nominee	
14	Dr.M.Ganesh Madhan, Professor / Dept. of ECE Madras Institute of Technology campus, Anna University, Chennai	Academic Expert	
15	Mr.P. Essaki Muthu, Chief Scientist, River Silica, 3B, #60, Century Apartments, Indiranagar, Bangalore		
16	Mr.R.Ravishankar, Associate Vice President, K7 Computing, Chennai.	Industrial Expert	
17	Mr.Neelakandan Eswaran, Technical Unit Manager - ATE Test, Altran, Bangalore.		

18	Mr.R.Bala Subramanian, 4th year ECE	Student
19.	Mr.A.Siva Chidambaram, 3rd year ECE	Members

- The Academic Expert member Dr. M.Meenakshi, Professor / ECE, College of Engineering, Guindy, Chennai and Industrial Expert member Mr. R.Sathiesh, Senior Hardware Engineer, Robert Bosch Engineering and Business Solutions, Coimbatore could not attend the meeting due to their prior commitments and unavoidable reasons and were granted leave of absence.
- BoS / ECE 9.1 : WELCOME ADDRESS AND OPENING REMARKS BY
  CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT
  OF ELECTRONICS AND COMMUNICATION ENGINEERING
  The Chairman, BoS of the Electronics and Communication
  Engineering welcomed and introduced the members of 9th Board
  of Studies and thanked each one of them for sparing their

valuable time to attend the meeting.

- BoS / ECE 9.2 : TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING
  HELD ON 18th NOVEMBER, 2017

  The minutes of the Eighth Board of Studies meeting held on 18th
  November, 2017 were communicated to the members. The
  comments received have been incorporated and placed for
  confirmation. The same was approved by the 8th Academic
  council.
- BoS/ECE 9.3.1 : TO CONFIRM AND APPROVE THE CURRICULUM OF UG
  DEGREE PROGRAMME TO BE OFFERED UNDER R-2019
  RESOLVED TO approve the Curriculum of UG degree
  programme to be offered under R-2019
- BoS/ECE 9.3.2 : TO CONFIRM AND APPROVE THE CURRICULUM MODIFICATION FOR PG DEGREE PROGRAMME (M.E. – EST) TO BE OFFERED UNDER R-2015

RESOLVED TO approve the curriculum modification for PG degree programme (M.E. – EST) to be offered under R·2015

- BoS / ECE 9.4 : ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS
- BoS / ECE 9.5 : SUGGESTIONS GIVEN BY THE BOS MEMBERS
  - 9.5.1 : The BoS members reviewed the proposed structure of Undergraduate Electronics and Communication Engineering Program based on the AICTE model curriculum ((January 2018)
  - 9.5.2 : Workshop/Manufacturing practices course may be moved to semester I
  - 9.5.3 : The BoS members resolved to modify the course titled "Programming for Problem Solving" as "C- Programming"
  - 9.5.4 : Basic Electrical Engineering course may be shifted from I semester to II semester
  - 9.5.5 : VLSI Design and VLSI Design Laboratory courses may be included in curriculum as Core courses
  - 9.5.6 : Basic Electrical Engineering course content may be reduced and the credit for the course may be changed to 3
  - 9.5.7 : The BoS members resolved to modify the course titled "Mini Project/ Electronic Design Workshop" as "Product Development Lab"
  - 9.5.8 : Introduction to Electromagnetic theory can be introduced as one of basic science course during the second semester in place of physics – II
  - 9.5.9 : The following courses are suggested as elective courses for M.E. Embedded System Technologies
    - VLSI Signal Processing
    - Multimedia Compression Techniques
    - · Cognitive Radio Techniques
    - · Wireless Sensor Networks
    - FPGA Based Communication System Design
    - LTE for Mobile Broadband
    - Design and Deployment of Wireless
    - Sensor Network

The members had a brainstorming discussion and interaction among themselves. After discussion, fruitful suggestions were incorporated appropriately in the Curriculum.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

- Curriculum for Regulation 2019 offered under B.E. Electronics and Communication Engineering degree course.
- ❖ PG (M.E Embedded System Technologies) Curriculum Modification.

Dr.V.R.S.Mani, Asso Prof (SG) thanked all the members for their kind cooperation and the meeting came to an end.

#### Members Present

Dr.A.Shenbagavalli	
Professor & Head	Agann
Chairman	STOP TOUR STEEL STEEL
Internal Members	
Dr.V.Vijayarangan, Professor	Wyzzon
Dr.S.Tamilselvi, Professor	J. 15/6/
Mr.N.Arumugam, Asso.Prof.	N.As-
Dr.V.R.S.Mani, Asso. Prof. (SG)	V-R-5/
Mr.T.Devakumar, Asst. Prof. (SG)	96000
Mr.T.Vijayanandh, Asst. Prof. (SG)	Estante Silver
Mr.K.J.Prasanna Venkatesan, Asst. Prof. (SG)	bil.
Mr. A.Saravana Selvan, Asst. Prof. (SG)	A.L.
Mr.S.Cammillus, Asst. Prof. (SG)	Charles ,
Dr.T.S.Arun Samuel, Asso. Prof.	Marchi
Mr.M.Satheesh Kumar, Asst. Prof.	getun
Expert nominated by Anna university, Chennai	
Dr. Rahilal Bilal,	Rabila Med
Associate Professor,	lam
Department of ECE,	
Thanthai Periyar Government Institute of	
Technology, Vellore - 632002	

Academic Experts	
Dr.M.Ganesh Madhan, Professor, Department of ECE, Madras Institute of Technology campus, Anna University, Chennai-600044	M.han
Industrial Experts / Alumnus	
Dr. P. Essaki Muthu, Chief Scientist, River Silica, 3B, #60, Century Apartments, 100 Feet Road Indiranagar, Bangalore - 560 038	It white
Special Invitees / Industrial Experts	
Mr. R Ravishankar, Associate Vice President, K7Computing, Chennai.	20m
Mr. Neelakandan Eswaran, Technical Unit Manager - ATE Test, Altran, Bangalore.	R. Meda komolan
Student Members Nominated by the HOD	
Mr.R.Bala Subramanian, 4th year ECE	U-Bala X
Mr.A.Siva Chidambaram, 3rd year ECE	3~ WiamA

CHAIRMAN

BOARD OF STUDIES

# Department of Computer Science and Engineering

MINUTES of 9th Meeting of the Board of studies held on 21st April, 2018 at 10.30 AM

Venue: Seminar Hall, CSE National Engineering College, K.R. Nagar, Kovilpatti – 628 503

## Department of Computer Science and Engineering

# National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

## 9th Board of studies Meeting in the Department of Computer Science and Engineering

Venue: Seminar Hall/CSE, National Engineering College K.R.Nagar, Kovilpatti – 628 503

Date & Time: 21.04.2018 & 10.30 AM

#### Agenda

BoS / CSE 9.1	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Computer Science and Engineering
BoS / CSE 9.2	Confirmation of the Minutes of the 8th meeting of Board of studies in the department of Computer Science and Engineering held on September'18th, 2017 and Action taken report of 8th meeting of Board of studies
BoS / CSE 9,3	Business brought forward by the Chairman, Board of studies 9.3.1. The Curriculum for B.E. (CSE) degree course offered under Regulation 2019 9.3.2. The Curriculum for M.E. (CSE) degree course offered under Regulation 2019
BoS / CSE 9.4	Any other items
BoS / CSE 9.5	Suggestions given by the BoS Members

## Department of Computer Science and Engineering

## National Engineering College, K.R.Nagar, Kovilpatti - 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/CSE

21st April, 2018

Dear Sir.

Sub: Minutes of the 9<sup>th</sup> Meeting of the Board of studies in the Computer Science and Engineering •Reg.

Kindly find attached herewith the Minutes of the 9th Meeting of Board of studies of the Computer Science and Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 21st April 2018 at 10.30 AM in the Seminar hall/CSE of National Engineering college. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at hodese@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

Dr.B.Paramasivan

## National Engineering College, K.R.Nagar, Kovilpatti - 628 503

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# Department of Computer Science and Engineering

## National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai)
www.nec.edu.in

#### MINUTES OF THE MEETING

The 9th Meeting of the Board of studies of the Computer Science and Engineering was held on 21st April, 2018 at 10.30 AM in the Seminar hall/CSE of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503

#### The following members were present:

Dr.B.Paramasivan Professor & Head		Chairman	
-			
	V.Gomathi, Professor		
	.V.Kalaivani, Professor		
	.K.Mohaideen Pitchai, Associate Professor (SG)		
Dr.S.Anantha Kumaran, Associate Professor			
)r.	V.Kavidha, Associate Professor		
)r.	S.Maheswari, Associate Professor		
4s	.M.Bhuvaneswari, Assistant Professor (SG)	Internal Members	
4s	s.M.Jayalakshmi, Assistant Professor (SG)	Internal Members	
4s	R.Rajakumari, Assistant Professor (SG)		
Mr.K.Maharajan, Assistant Professor (SG)			
Mr. D. Vijayakumar, Assistant Professor (SG)			
Ms.G.Sivakama Sundari, Assistant Professor			
vis.	G.R.Hemalakshmi, Assistant Professor		
Иr	.C.Bebin Suresh		
Dir	rector-DevOps, Unified Technology Office	5 419 52 VI 1054 All	
Ca	pgemini India, Bangalore	Industrial Expert	
Δr	.D. Rajesh Kannan		
Seş	gment Head – Nielsen		
Cat	ta Consultancy Services	Industrial Expert	
Ch	ennai	30000 000000000000000000000000000000000	

17.	Dr. SP. Rahmesh HCL Technologies Limited Medavakkam High Road, Sozhanganallur Village, Chennai – 600 119	Industrial Expert	
18.	Mr.K.N.Visveswaran Chief Mentor, Hexavarsity Hexaware Technologies Limited Siruseri Campus, H5, Sipcot IT Park, Navallur Post Chennai – 603 103, Kancheepuram Dist	Industrial Expert	
19.	Mr.Antony Dasan Arravindh Senior Project Manager HCL Technologies Limited Medavakkam High Road, Sozhanganallur Village, Chennai – 600 119	Industrial Expert related to Placement	
20.	Mr. E.Beno Solomon, III year CSE	Student Members	
21.	Ms. M.Bhava Tharani, III year CSE	Nominated by the HOD	

2. The University Nominee Dr.P.Uma Maheswari, Professor, Department of CSE, Anna University, Regional Centre Coimbatore and the Expert Members Dr.K.K.Shukla, Professor, Department of CSE, Indian Institute of Technology (BHU), Varanasi, and Dr. A.V.Reddy, Professor, Department of Computer Applications, NIT, Trichy and the Alumni member Mrs. Maria Justin Mary, IT Lead-Remedy Application Honeywell Technology Solutions Madurai could not attend the meeting due to their prior commitments and unavoidable reasons and were granted leave of absence.

BoS / CSE 9.1 : WELCOME ADDRESS AND OPENING REMARKS BY
CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT
OF COMPUTER SCIENCE AND ENGINEERING
The Chairman, BoS of the Computer Science and Engineering

welcomed and introduced the members of 9th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.

BoS / CSE 9.2 : TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING
HELD ON 18th SEPTEMBER, 2017
The minutes of the Eighth Board of Studies meeting held on 18th

September, 2017 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.

## Action Taken Report

(Enclosed in Annexure I)

BoS / CSE 9.3 : TO CONFIRM AND APPROVE THE CURRICULUM FOR THE

UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO approve the Curriculum for the UG degree

programme to be offered under R-2019

#### R-2019 Curriculum for B.E.(CSE)

(Enclosed in Annexure II)

BoS / CSE 9.4 : TO CONFIRM AND APPROVE THE CURRICULUM FOR THE
PG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019
RESOLVED TO approve the Curriculum for the UG degree
programme to be offered under R-2019

#### R-2019 Curriculum for M.E.(CSE)

(Enclosed in Annexure III)

BoS / CSE 9.5 : ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS

> On the whole, this new initiative was very much appreciated by all members. The challenges faced can be periodically discussed with them. They also congratulated the faculty members for their team efforts towards continuing Education.

#### BoS / CSE 9.6 : SUGGESTIONS GIVEN BY THE BOS MEMBERS

- 9.6.1 : Programming principles may be taught instead of languages directly
- 9.6.2 : Encourage students to feel the essence of Geeks for Geeks in core courses
- 9.6.3 Students must be taught to articulate the concepts / standards clearly during interviews
- 9.6.4 : Awareness about software industry processes can be ensured through courses

9.6.5	4.9	The credits for Research papers and patent review / seminar must be at least 3
9.6.6	:	Interdisciplinary projects/ App design should be encouraged
9.6.7	**	For N/W security domain, fix the level and depth of security standards to be taught
9.6.8		In lab courses, practice the students to build solutions with configurations
9.6.9	+	On NEC digital details explore the laboratory case studies and perform predictive analytics
9.6.10	ः	Infrastructure Programming and Software Management related courses may be offered
9.6.11	3	Willing to offer "Predictive Intelligence" filed oriented Student Intern projects
9.6.12		Encourage the problem solving approaches with design patterns, to improve analytical skills
9.6.13	*	Natural Language Processing has wide scope in automated client voice translation
9.6.14	(99)	Introduce a course on "Current Trends in IT", the syllabus will be based on current track
9.6.15	**	Fix prerequisites for Elective courses and focus the students on a specific sub-domain
9.6.16	*	Prepare a Job path finding chart through curriculum of courses
9.6.17	i.	Problem solving techniques may be offered before programming languages
9.6.18	Æ	For IF Journal Publication, Industrial Global Certifications, 1 credit relaxation may be offered
9.6.19		The student member Ms.M.Bava Tharani, 3 <sup>rd</sup> year CSE, requested to incorporate Embedded Systems as a part of curriculum to support the course Product development laboratory
9.6.20	I	Comprehensive or soft skill should be added in any one semester to improve the communication skill

The members had a brainstorming discussion and interaction among themselves.

After discussion, fruitful suggestions were incorporated appropriately in the Curriculum and Syllabi.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

- a) The Curriculum for B.E. (Computer Science and Engineering) degree course offered under Regulations 2019.
- b) The Curriculum for M.E. (Computer Science and Engineering) degree course offered under Regulations 2019

Dr. V.Kavidha, Associate Professor, thanked all the members for their kind cooperation and the meeting came to an end.

#### Members Present

Dr.B.Paramasivan Chairman	Blay attive
Internal Members	
Dr.V.Gomathi Professor	V. C -2114118
Dr.V.Kalaivani Professor	V. Kalitelle
Dr.K.Mohaideen Pitchai Associate Professor (SG)	4.07/21/4/18
Dr.S.Ananthakumaran Associate Professor	Dalmentins.
Dr.V.Kavidha Associate Professor	Kanillyatte
Dr.S.Maheswari Associate Professor	SMaherwasilo4/12
Ms.M.Bhuvaneswari Assistant Professor (SG)	M. Amo Allogizaca
Ms.M.Jayalakshmi Assistant Professor (SG)	21/00/13
Ms.R.Rajakumari Assistant Professor (SG)	Rusilalia
Mr.K.Maharajan Assistant Professor (SG)	(K) 20 21/4/18
Mr. D.Vijayakumar Assistant Professor (SG)	Vyes king

Ms.G.Sivakama Sundari	eg. Sivales and
Assistant Professor	(f) 1
Ms.G.R.Hemalakshmi	G. E. Verrels
Assistant Professor	Us- c- Genrala
Industrial Experts	
Mr.C.Bebin Suresh Director-DevOps, Unified Technology Office	At
Capgemini India, Bangalore	385 3
Mr.D.Rajesh Kannan Segment Head- Nielsen Tata Consultancy Services, Chennai	DZ-11
Dr. SP. Rahmesh HCL Technologies Limited SEZ Unit, ELCOT special economic zone, SDB5,#602/3, No.138, Medavakkam High Road, Sozhanganallur Village, Chennai – 600 119	5 pul
Mr.K.N.Visveswaran Chief Mentor, Hexavarsity Hexaware Technologies Limited Siruseri Campus, H5, Sipcot IT Park, Navallur Post Chennai – 603 103, Kancheepuram Dist.	Viveswonan. KN.
Industrial Experts related to Placement	
Mr.Antony Dasan Arravindh Senior Project Manager HCL Technologies Limited SEZ Unit, ELCOT special economic zone, SDB5, #602/3, No.138, Medavakkam High Road, Sozhanganailur Village, Chennai – 600 119	Marining
Student Members Nominated by the HOD	
Mr. E. Beno Solomon, III year CSE	E. Bens Solomon)
Ms. M. Bhava Tharani, III year CSE	U. Sharathasen

CHAIRMAN BOARD OF STUDIES

Department of Communication & Engineering Network Communication & Engineering Research & Engineering Reviews & Engineering Confederation & Engineering & Eng

MINUTES 9th Meeting of the Board of studies held on 27th April, 2018 at 10.30 AM

Venue: Conference Hall, National Engineering College, K.R.Nagar, Kovilpatti – 628 503

National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

> 9th Board of studies Meeting in the Department of Electrical and Electronics Engineering

Venue: Conference Hall, National Engineering College K.R.Nagar, Kovilpatti – 628 503

Date & Time: 27.04.2018 & 10.30 AM

# AGENDA

BoS / EEE 9.1	***	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Electrical and Electronics Engineering
BoS / EEE 9.2	20	Confirmation of the Minutes of the 8th meeting of Board of studies in the department of Electrical and Electronics Engineering held on November 17th 2017, and Action taken report of 8th meeting of Board of studies
BoS / EEE 9.3	3	Business brought forward by the Chairman, Board of studies  9.3.1 Curriculum for UG Degree Programme under Regulation 2019  9.3.2 Curriculum for PG Degree Programme under Regulation 2019
BoS / EEE 9.4	1	Any other items
BoS / EEE 9.5	1	Suggestions given by the BoS Members

National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution · Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/EEE/.....

27th April, 2018

Dear Sir/Madam.

Sub: Minutes of the 9th Meeting of the Board of studies in the EEE-Reg.

Kindly find attached herewith the Minutes of the 9th Meeting of Board of studies of the Electrical and Electronics Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 27th April, 2018 at 10.30 AM in the conference hall of National Engineering college. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at <a href="hodeee@nec.edu.in">hodeee@nec.edu.in</a> or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

Dr.M. Willjuice Irathayarajan

#### MINUTES OF THE MEETING

The 9th Meeting of the Board of studies of the Electrical and Electronics Engineering was held on 27th April, 2018 at 10.30 AM in the Conference Hall of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503.

## 1. The following members were present:

1.	Dr.M.Willjuice Iruthayarajan	Chairman
	Professor and Head	
2.	Dr.L.Kalaivani	
	Professor/ EEE	
3.	Dr.R.V.Maheswari	
	Professor/ EEE	
4.	Dr.M.Ravindran	62 20
	Associate Professor (S.G)	Internal
5.	Mr.N.B.Prakash	Members
	Associate Professor	
6.	Mr.G.Kannayeram	
	'Assistant Professor(S.G)	
7.	Mr.M.P.E.Rajamani	
	Assistant Professor (S.G)	
8.	Dr. M. Saravanan	
	Professor/EEE,	
	Thiagarajar College of Engineering,	0.40000010000000
	Madurai.	Academic
9,	Dr. V. Sankaranarayanan	Expert
	sociate Professor/EEE,	
	National Institute Technology, Trichy	
10.	Dr. C. Ponmani,	200000 0000
	Assistant Professor/EEE,	University
	Government College of Engineering,	Nominee
	Tirunelveli,	
11.	Dr. Santosh Kumar Annadurai	
	GE T&D Ltd., GIS R&D Centre,	
	Unit R&D Head,	Industrial
	Padappai, Chennai.	Expert
12.	Dr. Hariram Satheesh	= = 104200
	Principal Scientist,	
	ABB Global Industries and Services Ltd Bangalore.	
	Dangatore,	

13.	Mr. M. Ramesh Senior Technical Engineer, Hardware Design and Development, Data Patterns India Pvt. Ltd., Chennai.	
14.	Dr.G.Venkatesan Professor/EEE, Karpagam College of Engineering, Coimbatore	Meritorious Alumnus
15.	Mr. R.Jayakumar Delivery Manager, Ford Motor Company, Chennai.	Special Invitee
16.	Ms. M.Ani Nithusha, Third Year	Student
17.	Mr.R. Aravindhan, Third Year	Members

- The Industrial Expert Mr. S. Subramanian, Senior Maintenance Engineering, Kudankulam Nuclear Power Project, Kudankulam could not attend the meeting due to his prior commitments and unavoidable reasons and were granted leave of absence.
- Bos/EEE 9.1 : WELCOME ADDRESS AND OPENING REMARKS BY
  CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT
  OF ELECTRICAL AND ELECTRONICS ENGINEERING
  The Chairman, BOS of the Electrical and Electronics
  Engineering welcomed and introduced the members of 9th
  Board of Studies and thanked each one of them for sparing
  their valuable time to attend the meeting.
- BoS / EEE 9.2 : TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING
  HELD ON 17th NOVEMBER, 2017

The minutes of the Eighth Board of Studies meeting held on 17th November, 2017 were communicated to the members vide letter No. F. No. 1-1/NEC/EEE, Dated 17.11.2017. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.

- Minutes of 08th Board of Studies
- Action Taken Report
   (pdf file attached in hyperlink)

BoS / EEE 9.3.1 : TO CONFIRM AND APPROVE THE CURRICULUM, FOR
UG DEGREE PROGRAMME BASED ON AICTE MODEL
CURRICULUM TO BE OFFERED UNDER R-2019

RESOLVED TO approve the curriculum, for UG degree programme based on AICTE model curriculum to be offered under R-2019

#### R-2019 Curriculum for UG degree

BoS / EEE 9.3.2 : TO CONFIRM AND APPROVE THE CURRICULUM OF PG
DEGREE PROGRAMME TO BE OFFERED UNDER R-2019
RESOLVED TO approve the curriculum of PG degree
programme to be offered under R-2019

#### R-2019 Curriculum for PG degree

BoS / EEE 9.4 : ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS

The BoS members had a good interaction with the chairman, internal members and student members regarding Modifications in the Existing Curriculum and Syllabus Curriculum for Regulation 2019. They requested to include pie charts for representation of number of core and elective courses in the curriculum. They also insisted us to list the open elective courses conducted by EEE department. They advised to invite industrial experts to handle the 25% of course content to promote insustrial exposure among students. The student members also actively participated and share their views in framing the curriculum for Regulatiopn 2019. Finally they appreciated the staff and student members for smooth conduct of the meeting.

#### BoS / EEE 9.5 : SUGGESTIONS GIVEN BY THE BOS MEMBERS

- 9.5.1. Courses such as Workshop/Manufacturing practices and Engineering Practices may be moved to I semester
- Applied Engineering for Electrical Engineers course can be given in II semester.

- 9.5.3. Mathematics can be splitted in to four mathematical courses with Equal Credit Distribution instead of three as per AICTE model curriculum.
- 9.5.4. In the course "programming for problem solving", the Python language may be included.
- 9.5.5. For the courses, Engineering Mechanics and Biology, course content should be reduced.
- 9.5.6. For the course, Electronic Design laboratory course content may revised.
- High Voltage Engineering and Electric Drives and Control courses may included in Core course.
- 9.5.8. Electromagnetic Interference and Electromagnetic

  Compatiblity course may be included in Elective course.
- 9.5.9. Courses related to Industrial Internet of Things, Cyber Physical System may be given for Open Elective Courses.
- Power Quality course may be given as Program Elective Course.
- Software Development Life Cycle may be given as Open Elective Course.
- 9.5.12. For M.E. High Voltage Engineering, the title for the course "Advanced Topics of High Voltage Engineering" may be modified as "Applications of High Voltage Engineering"
- For M.E. High Voltage Engineering.
  - · Green Insulations.
  - · Power Transformers and
  - Insulation Coordination courses may be given as Program Elective Course.
- 9.5.14. For M.E. High Voltage Engineering, the topics realted to,
  - Finite Difference Method.
  - · Charge Simulation Method and
  - Boundary Element Method may be taught in detail to clearly understand the desin concepts of electrical apparatus.

The members had a brainstorming discussion and interaction among themselves.

After discussion, fruitful suggestions were incorporated appropriately in the Curriculum and Syllabi.

Based on the suggestions given by the members, BoS resolved to recommend the following to the Academic Council for further approval.

- a) Modifications in the Existing Curriculum and Syllabus
- b) Curriculum for Regulation 2019-UG
- e) Curriculum for Regulation 2019-PG

Mr. N. B. Prakash, Associate Professor/EEE thanked all the members for their kind cooperation and the meeting came to an end.

#### Members Present

Dr.M.Willjuice Iruthayarajan, Chairman, BoS/EEE	7. mile = 27/04/14
Internal Members	
Dr.L.Kalaivani, Associate Professor (S.G)/EEE	Kult
Dr.M.Ravindran, Associate Professor (S.G) /EEE	M. Renneden
Dr.R.V.Maheswari, Associate Professor/EEE	R. v. maheman
Mr.N.B.Prakash, Associate Professor/EEE	francis .
Mr.G.Kannayeram, Assistant Professor(S.G) /EEE	G. Kenneyerry
Academic Experts	
Dr. M. Saravanan, Professor/EEE, Thiagarajar College of Engineering, Madural, Tamilnadu.	M. Swa14/18.
Dr. V. Sankaranarayanan, Associate Professor/EEE, National Institute of Technology, Trichy	2014/200
University Nominees	
Dr. C. Ponmani, Assistant Professor/EEE, Government College of Engineering, Tirunelveli.	Printy
Industrial Experts	
Dr. Santosh Kumar Annadurai, GE, GIS R&D Centre, Unit R&DHead, Padappai, Chennai.	Que 104 120 18

<b>Dr. Hariram Satheesh,</b> Principal Scientist, ABB Global Industries and Services Ltd Bangalore.	B. T. 27/04/18
Industrial Experts related to Placement	
Mr. M. Ramesh, Senior Technical Engineer, Hardware Design and Development, Data Patterns India Pvt. Ltd., Chennai.	il & Selen like.
Alumni Nominated by the Principal	
Dr.G.Venkatesan, Professor/EEE, Karpagam College of Engineering, Coimbatore	Bert 37/04/19
Special Invitee	
Mr. R.Jayakumar, Delivery Manager,Ford Motor Company, Chennai.	Beysterns 27/04/208
Student Members Nominated by the HOD	
Ms. M.Ani Nithusha, Third Year /EEE National Engineering College, Kovilpatti	M. a. NHhmi.
Mr. R. Aravindhan, Third Year /EEE National Engineering College, Kovilpatti	R. Avandhour

CHAIRMAN BOARD OF STUDIES

# Department of Electronics and Instrumentation Engineering

MINUTES 9th Meeting of the Board of studies held on 3rd May, 2018 at 10.00 AM

Venue: Conference Hall, National Engineering College, K.R.Nagar, Kovilpatti – 628 503

National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution · Affiliated to Anna University, Chennai) www.nec.edu.in

# Department of Electronics and Instrumentation Engineering

# National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution · Affiliated to Anna University, Chennai) www.nec.edu.in

## 9th Board of studies Meeting in the Department of Electronics and Instrumentation Engineering

Venue: Conference Hall, National Engineering College K.R.Nagar, Kovilpatti – 628 503

Date & Time: 03.05.2018 & 10.00 a.m.

## AGENDA

EIE/BoS 9.1	: Welcome address and Opening Remarks by Chairman, Board of studies in the department of Electronics and Instrumentation Engineering
EIE /BoS 9.2	: Confirmation of the Minutes of the 8th meeting of Board of studies in the department of Electronics and Instrumentation Engineering held on November, 18, 2017 and action taken report of 8th meeting of Board of studies
EIE/BoS 9.3	: Business brought forward by the Chairman, Board of studies
	9.3.1. Curriculum for UG degree programme
	under Regulation 2019
EIE/BoS 9.4	: Any other items
EIE/BoS 9.5	: Suggestions given by the BoS Members

# Department of Electronics and Instrumentation Engineering

# National Engineering College, K.R.Nagar, Kovilpatti – 628 503 (An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/Branch/EIE

5th May, 2018

Dear Sir/Madam.

Sub: Minutes of the 9th Meeting of the Board of studies in the Electronics and Instrumentation Engineering - Reg.

Kindly find attached herewith the Minutes of the 9th Meeting of Board of studies of the Electronics and Instrumentation Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 3rd May, 2018 at 10.00 AM in the conference hall of National Engineering college. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at hodeic@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

(Dr.B.Sankaragomathi)

# Department of Electronics and Instrumentation Engineering

## MINUTES OF THE MEETING

The 9<sup>th</sup> Meeting of the Board of studies of the Electronics and Instrumentation Engineering was held on 03<sup>rd</sup> May, 2018 at 10.00 AM in the Conference Hall of the National Engineering College, K.R. Nagar, Kovilpatti – 628 503

## 1. The following members were present:

1	Dr.B.Sankaragomathi Professor & Head	Chairman		
2	Dr.D.Shanthi, Asso.Prof. (SG)			
3	Mr. Jackson Daniel, Asso.Prof.			
4	Mr.V.Suresh, Asso.Prof.			
5	Dr.S.Manikandan, Asso.Prof.	1		
6	Dr.R.Arun, Asso.Prof.	Internal Members		
7	Mr.T.Ramakrishnan, Asst. Prof. (SG)			
8	Mrs.M.Carmel Sobia, Asst. Prof. (SG)			
9	Mrs.A.Geetha, Asst. Prof. (SG)			
10	Mrs.J.Babitha Thangamalar, Asst. Prof. (SG)			
11	Dr.V.Subbiah Bharathi Dean SRM University, Bharathi Salai, Ramapuram, Chennai – 600 089	Academic Expert		
12	Dr.K. Latha Associate Professor, Department of Instrumentation Engineering, MIT Campus, Chennai '600 044.	University Nominee		
13	Dr.B.Kalyan Ram President, International Association of Online Engineering (IAOE) Committee Member, Indo-Universal Collaboration for Engineering Education (IUCEE),	Industrial Expert		
	CEO, Electrono Solutions Pvt Ltd, Bangalore.			

14	Mr. R.Sudharson, Final year	Student Members
15	Ms. T.Brama Sakthi Haritha, Final year	Student Memoria

2. The Academic Expert Dr. S.Edward Rajan, Professor / EEE, Mepco Schlenk Engineering College, Sivakasi, the Industrial Experts Mr.Ramesh, Head – Instrumentation, Sterlite copper, Vedanta Limited, SIPCOT Industrial Complex, Thoothukudi and Mr.K.T.Gandhi Karuna, Chief Technology Officer, Watsimit Mobile Technologies Pvt. Ltd., Kanchipuram could not attend the meeting due to their prior commitments and unavoidable reasons and were granted leave of absence:

BoS / EIE 9.1	: WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING
	The Chairman, BOS of the Electronics and Instrumentation Engineering welcomed and introduced the members of 9 <sup>th</sup> Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / EIE 9.2	: TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING HELD ON 18th NOVEMBER, 2017
	The minutes of the Eighth Board of Studies meeting held on 18th November, 2017 were communicated to the members vide letter No. NEC/Dean(Aca)/2017-18 dated 28.11.2017. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.
BoS / EIE 9.3.1	TO CONFIRM AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R- 2019
	RESOLVED TO approve the curriculum for UG degree programme to be offered under R-2019  R-2019 Curriculum for UG degree

BoS / EIE 9.4	ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS
BoS / EIE 9.5	SUGGESTIONS GIVEN BY THE BOS MEMBERS
9.5.1.	The BoS members reviewed the proposed structure of Undergraduate Electronics and Instrumentation Engineering Program based on the AICTE model curriculum ((January 2018)
9.5.2.	The BoS members recommended to include the course societal applications of engineering or Finance and accounting under Humanities and Social sciences including Management courses (HSMC) category and some of the Professional core courses (PCC) may be offered as Professional Elective courses (PEC) or Open Elective courses (OEC).
9.5.3.	The BoS members resolved to modify the course titled "C and Python Programming" as "Object oriented programming" (which includes C++ and one unit of Python) in the second semester.
9.5.4.	Based on the BoS student member's opinion, the BoS experts suggested that the Electric circuit analysis laboratory may have half of the experiments as simulation type and the remaining as experimental type. They also suggested that the hours for laboratory session may be increased from 2 periods to 3 or 4 periods
9.5.5.	The BoS members recommended that a new software tool may be introduced in the laboratory courses of each semester
9.5.6.	The BoS members resolved to include the course comprehension in the VI Semester
9.5.7.	The following courses are suggested as open elective courses  Industrial IoT  Biomedical Instrumentation  Non-destructive testing  Wireless Sensor Networks  MEMS  Virtual Instrumentation  Industrial Automation

The members had a brainstorming discussion and interaction among themselves, After discussion, fruitful suggestions were incorporated appropriately in the Curriculum.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

The curriculum for B.E. Electronics and Instrumentation Engineering degree course offered under Regulation 2019.

Dr. D. Santhi, Associate Professor (SG) thanked all the members for their kind cooperation and the meeting came to an end.

## Members Present

Dr.B.Sankaragomathi Professor & Head Chairman	D8000 3/5/11
Internal Members	
Dr.D.Santhi Associate Professor (SG)	Dourn' aglostis.
Mr.Jackson Daniel Associate Professor	Charge 13/5/18
Mr.V.Suresh Associate Professor	Udmin 3/5/18.
Dr.S.Manikandan, Associate Professor	Sml 315118
Dr.R.Arun Associate Professor	1 3/5/10
Mr.T.Ramakrishnan Assistant Professor (SG)	m 3/5/18
Mrs.M.Carmel Sobia Assistant Professor (SG)	Manual 3/5/18.
Mrs.A.Geetha Assistant Professor (SG)	031918
Mrs.J.Babitha Thangamalar Assistant Professor (SG)	15118

University Naminee	
Dr.K. Latha Associate Professor, Department of Instrumentation Engineering, MIT Campus, Chennai -600 044. Phone No.:9500064042 Mail id: klatha@annauniv.edu, lat_padhu@yahoo.com	Ab alte 3/5/10
Academic Experts	
Dr.V.Subbiah Bharathi Dean SRM University,Bharathi Salai, Ramapuram, Chennai – 600 089 Phone No.:9443078792 Mail id : yughasurya@gmail.com	B 1/2/2013
Industrial Expert – Invitee	
Dr.B.Kafyan Ram President, International Association of Online Engineering (IAOE) Committee Member, Indo-Universal Collaboration for Engineering Education (IUCEE), CEO, Electrono Solutions Pvt Ltd, Bangalore, Mobile number: +91 9741117119 Mail ID: kalyan@electronosolutions.com	B = 3/5/18
Student Members Nominated by the HOD	
Mr.Sudharsan.R IV year EIE Student	R. Sudharson
Ms.Brama Sakthi Haritha.T IV year EIE Student	Hetare

MINUTES of 9th Meeting of the Board of studies held on 28th April, 2018 at 11.00 AM

Venue: Department of Information Technology, National Engineering College, K.R.Nagar, Kovilpatti – 628503

National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai)

www.nec.edu.in

# National Engineering College, K.R.Nagar, Kovilpatti - 628503

(An Autonomous Institution Affiliated to Anna University, Chennai) www.nec.edu.in

# 9th Board of studies Meeting in the Department of Information Technology

Venue: Department of IT, National Engineering College K.R.Nagar, Kovilpatti – 628 503

Date & Time: 28.04.2018 & 11.00 a.m.

## AGENDA

BoS / IT 9.1	**	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Information Technology
BoS / IT 9.2	+	Confirmation of the Minutes of the 8 <sup>th</sup> meeting of Board of studies in the department of Information Technology held on 11 <sup>th</sup> NOV 2017 and Action taken report of 8 <sup>th</sup> meeting of Board of studies
BoS / IT 9.3	ŧ	Business brought forward by the Chairman, Board of studies 9.3.1 Curriculum for Regulation 2019 (U.G & P.G) 9.3.2 Modification in 15IT09E - Big Data Analytics elective course UG degree programme R·2015
BoS / IT 9.4	:	Any other items
BoS / IT 9.5		Suggestions given by the BoS Members

# National Engineering College, K.R.Nagar, Kovilpatti - 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 9.1/NEC/ IT/2018-19

28th April, 2018

Dear Sir/Madam,

Sub: Minutes of the 9th Meeting of the Board of studies in the Information Technology -Reg.

Kindly find attached herewith the Minutes of the 9th Meeting of Board of studies of the Information Technology of the National Engineering College, K.R.Nagar, Kovilpatti – 628503 held on 28th April, 2018 at 11.00AM in the department of Information Technology of National Engineering College. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at <a href="hodit@nec.edu.in">hodit@nec.edu.in</a> or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

(Dr.D.Manimegalai)

## MINUTES OF THE MEETING

The 9th Meeting of the Board of studies of the Information Technology was held on 28th April 2018 at 11.00 AM in the Department of Information Technology of the National Engineering College, K.R. Nagar, Kovilpatti – 628503

## The following members were present:

1.	Dr.D.Manimegalai	Chairman	
2.	Dr.V.Seenivasagam, Prof. & COE		
3.	Dr.K.G.Srinivasagan, Professor	Internal Members	
4.	Dr.S.Sankar Ganesh, Asso. Prof. (SG)		
5.	Mr.R.Muthukkumar, Asst. Prof. (SG)		
6.	Dr.M.Kaliappan, Asso. Prof.		
7.	Ms.V.Anitha, Asst. Prof.		
8.	Dr. S.Valli, Professor / Department of CSE Anna University, Chennai		
9.	Dr. L.Ganesan, Professor / Department of CSE, Alagappa Chettiar College of Engg. & Tech Karaikudi	Academic Experts	
10.	Dr. P.Latha, Associate Professor / Department of CSE, Government College of Engineering, Tirunelveli	University Nominee	
11.	Mr.R.Rajasekar Director Bizpluz Tech Services Pvt. Ltd., Chennai	Industrial Expert	
12.	Dr.P.Yogesh, Associate Professor, Department of Information Science and Tech. Anna University, Chennai.	Special Invitee	
13.	K.S.Kasieram, Final year	Student Members	
14.	R.Priyadharshini, Final year		

2. The Industrial Expert Mr. Somu Chockalingam, Director, Doyen Systems Private Limited, Chennai and the Special Invitee Shri. E.Khalieraaj Regional Director, National Cyber Defence Research Centre (NCDRC) Team, New Delhi and Dr. A.Soundarrajan, Associate Professor / Department of IT, PSG College of Technology, Coimbatore could not attend the meeting due to their prior commitments and unavoidable reasons and was granted leave of absence.

BoS / IT 9.1		WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF INFORMATION TECHNOLOGY
		The Chairman, BoS of the Information Technology welcomed and introduced the members of 9th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / IT 9.2	:	TO CONFIRM THE MINUTES OF EIGHTH BOS MEETING HELD ON 11th NOVEMBER, 2017
		The minutes of the Eighth Board of Studies meeting held on 11th November, 2017 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.  > Action Taken Report (Enclosed in Annexure I)
BoS / IT 9.3.1		TO CONFIRM AND APPROVE THE CURRICULUM FOR THE UG DEGREE & PG DEGREE PROGRAMME TO BE PROPOSED UNDER R-2019
	1	RESOLVED TO approve the Curriculum for the UG degree & PG degree programme to be proposed under R-2019
BoS / IT 9.3.2	3	TO CONFIRM AND APPROVE THE MODIFICATION IN 15IT09E - BIG DATA ANALYTICS ELECTIVE COURSE FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2015

		RESOLVED TO approve the modification in 15IT09E - Big Data Analytics elective course for UG degree programme to be offered under R-2015
BoS / IT 9.4	***	ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS
		On the whole, the proposed curriculum for R·2019 was very much appreciated by all members. They also congratulated the faculty members for their team efforts towards continuing Education.
BoS / IT 9.5	4	SUGGESTIONS GIVEN BY THE BOS MEMBERS
9.5.1	82	Engineering Physics and Engineering Chemistry Laboratory may be separated with separate credits. Engineering Practice Laboratory must focus only on Electrical Electronic categories. Mechanical need not be included under it.
9.5.2	*	Mandatory Courses can be considered to have Value added credits instead of zero credits. With continuous assessment students must compulsorily pass those subjects.  Physics II must include contents from Material Sciences also.  Programming for Problem Solving should be given 4 credits whereas Digital Systems can have 3 credits.  Digital Systems must include 8085 Microprocessor in the Fifth Unit.  Digital Electronics Laboratory is renamed as Digital Systems Laboratory.
9.5.3	**	Information Technology Essentials is to be given in Third Semester itself for the students to study the fundamentals of IT. Syllabus is to be provided by Bizpluz.
9.5.4	### ### ### ### ######################	Biology may be included in the fourth semester.  Syllabus for Database Management Systems is to be provided by Bizpluz.  Computer Architecture is renamed as Computer Organization and Architecture  Uniformly 2 credits must be given for all Management subjects.

9.5.5	:	Compiler Design must be added as one of the Open Elective
		Courses.  IT Workshop (Sci Lab/MATLAB) - Laboratory should also include
		Rational Rose, NS2.
		Credits for Mini Project can be minimized from 6 to 4.
9.5.6	4	Credits for Project Work can be increased from 6 to 8.
9.5.7	35	Additional Domains like Mobile Computing and Social Computing can be included under electives.  Floating Subjects and DS Programming Android
		Elective Subjects such as IOS Programming, Android
	1	Programming, hybrid mobile Programming, M-Commerce, Digital
		Marketing, Search Engine Optimization, Mobile Communications,
		Angular & Note JS Technologies can be included under Mobile &
		Social Computing Domains.
9.5.8	1	Elective Subjects such as Business Intelligence for IT, Artificial
		Intelligence (AI), Reinforcement Learning(RL), Computational
		Cognitive Science, Natural Language Processing must be included
19		under Data Science Domain.
		Artificial Neural Networks can be removed.
9.5.9	1	Elective Subjects such as Cognitive Networks, Information Theory
7.00 Notice		and Coding, Cryptography and Network Security can be included
	- 39	under Networking Domain.
9.5.10	4	Applied Machine Vision can be renamed as Computer Vision in
1 100000		High Performance Computing Domain.
9.5,11	:	C# and .Net Programming can be removed and ASP.Net
A ORIGINAL		Programming can be retained in Software Development
		Fundamentals Domain.
9.5.12	:	Elective Laboratories must be added according to the given elective
0.0.12	0.50	subjects.
9.5.13	1	Students asked to give separate subject for C++,
		Students suggested that it is enough to show only 2 subject papers
		for verification of the End Semester Examination.

The members had a brainstorming discussion and interaction among themselves. After discussion, fruitful suggestions were incorporated appropriately in the curriculum.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

- a) The curriculum under Regulations 2019 for B.Tech. Information Technology and M.Tech. IT - Information and Cyber Warefare
- b) The Modification in the Syllabi proposed under Regulations 2015.

Ms.V.Anitha,AP thanked all the members for their kind cooperation and the meeting came to an end.

#### Members Present

Dr.D.Manimegalai, Prof & Head ,Board Chairman	D. M. [28] M. a
Internal Members	
Dr.V.Seenivasagam, Prof. & COE	Ace 418
Dr.K.G.Sriniyasagan, Professor	300
Dr.S.Sankar Ganesh, Asso, Prof.(SG)	J- Familia
Mr.R.Muthukkumar, Asst. Prof. (SG)	- Portuga
Dr.M.Kaliappan, Asso, Prof.	ments
Ms, V, Anitha, AP	V. hithe
Academic Experts	LANGUAGE CONTROLLER
Dr.S.Valli, Professor, Dept. of CSE, Anna University, Chennai.	Dai
Dr. L.Ganesan, Professor, Dept. of CSE, AC Tech, Karaikudi-630 004.	Chemenny
University Nominees	
Dr.P.Latha Associate Professor, Department of CSE, GCE, Tuirunelveli	Pla Regulit
Industrial Expert	
Mr.R.Rajasekar, Director Bizpluz Tech Services Pvt. Ltd., Chennai	18 Cell 18

Special Invitee	
Dr.P.Yogesh, Associate Professor, Department of Information Science and Technology, Anna University, Chennai	P. Ke
Student Members	
K.S.Kasieram, Final year	K.S. Kan
R.Priyadharshini, Final year	R. Prinachari

CHAIRMAN BOARD OF STUDIES

## ANNEXURE I

## Actions taken for Minutes of 8th BoS Meeting

As per BOS Committee suggestion,

- · Number of Course Outcomes for Theory courses have been reframed as 5 uniformly
- Number of Course Outcomes for Laboratory courses have been reframed as 2 uniformly
- Course Outcomes for One credit courses have been reframed to minimum of 1 or maximum of 2 in number
- Web references have been included for Programming and Laboratory Courses
- Student teams were formed and acquired guidance from other disciplines for Product Development Laboratory
- · In Cyber Forensics Case studies were included.

CHAIRMAN BOARD OF STUDIES

#### COURSE OUTCOMES

Upon completion of this course, the students will be able to

- CO 1: explain the various components in Hadoop ecosystems (K2)
- CO 2: describe the concepts of data science and R programming (K2)
- CO 3: apply hadoop mapReduce programming for handing Big Data (K3)
- CO 4: apply machine learning algorithms with R and Hadoop for data analytics.(K3)
- CO 5: describe the knowledge of social networking data analytics(K2)

#### UNIT I BIG DATA AND HADOOP

9

Introduction: Big Data and its importance, Four Vs, Drivers for Big data- BigData meets hadoop - Hadoop: Meeting the Big Data Challenge - Hadoop Ecosystem - HDFS, HDFS Architecture - Hadoop Distributions

#### UNIT II DATA SCIENCE AND R PROGRAMMING

9

Data Science in the Business World - Data science process - Loading data into R - Exploring data - Managing data.

#### UNIT III MAPREDUCE

9

MapReduce working principles: Anatomy of a MapReduce Job run – Failure – Job scheduling – Shuffle and Sort – Task execution - Loading data into HDFS - Writing Hadoop MapReduce Programs and implementations.

#### UNIT IV DATA ANALYTICS WITH R AND HADOOP

ä

Data analytics project life cycle -Understanding data analytics problems: Exploring web pages categorization- Computing the frequency of stock market change - Predicting the sale price of blue book for bulldozers - BigData Analysis with machine learning: Supervised machine-learning algorithms - Unsupervised machine-learning algorithms.

#### UNIT V SOCIAL NETWORKING DATA ANALYTICS

q

An introduction to social network data Analytics – Introduction - Online Social Networks: Research Issues - Research Topics in Social Networks. Data mining in social media - Data mining in a Nutshell - Social Media - Motivations for Data Mining in Social Media - Data Mining Methods for Social Media - visualizing social networks - A Taxonomy of Visualizations - The Convergence of Visualization - Interaction and Analytics.

#### TEXT BOOKS

- Boris lublinsky, Kevin t. Smith, Alexey Yakubovich, "Professional Hadoop Solutions", Wiley, ISBN: 9788126551071, 2015.
- 2. Vignesh Prajapati, "Big Data Analytics with R and Haoop", Packet Publishing 2013

#### REFERENCES

- Nina Zumel and John Mount , Practical Data Science with R, Manning Publications, 2014
- 2. Tom White, Hadoop: The Definitive Guide, 4th Edition, O'Reilly, 2015
- 3. Charu C. Aggarwal, "Social Network Data Analytics", Springer, 2011.
- Jared Dean, "Big Data, Data Mining, and Machine Learning: Value Creation for Business Leaders and Practitioners", Wiley India Private Limited, 2014.
- Jiawei Han, MichelineKamber, Jian Pei, "Data Mining Concepts and Techniques", Morgan Kaufman Publications, Third Edition, 2011

# Department of Civil Engineering

MINUTES 7<sup>th</sup> Meeting of the Board of studies held on 07<sup>th</sup> May 2018, 11:00 am

Venue: CADD Laboratory, Department of Civil Engineering National Engineering College, K.R. Nagar, Kovilpatti – 628503

# Department of Civil Engineering

# National Engineering College, K.R.Nagar, Kovilpatti – 628503 (An Autonomous Institution 'Affiliated to Anna University, Chennai) www.nec.edu.in

# 7th Board of studies Meeting in the Department of Civil Engineering

Venue: CADD Laboratory, Civil Department, National Engineering College, K.R.Nagar, Kovilpatti – 628503

Date & Time:07.05.2018 & 10.30 am

## Agenda

BoS / CIVIL 7.1	Welcome address and Opening Remarks by Chairma Board of studies in the department of Civil Engineerin	
BoS / CIVIL 7.2	Confirmation of the Minutes of the 6th meeting of Board of studies in the department of Civil Engineering he on 18th NOV 2017 and Action taken report of 6th meeting of Board of studies	
BoS / CIVIL 7.3	Business brought forward by the Chairman, Board of studies     Curriculum for UG Degree Programme under Regulation 2019	
BoS / CIVIL 7.4	Any other items	
BoS / CIVIL 7.5	Suggestions given by the BoS Members	

## Department of Civil Engineering

## National Engineering College, K.R.Nagar, Kovilpatti - 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

F. No. 1-1/NEC/[Branch/Civil Engineering

08.05.2018

Dear Sir/Madam,

Sub: Minutes of the 7th Meeting of the Board of studies in the Civil Reg.

Kindly find attached herewith the Minutes of the 7th Meeting of Board of studies of the Civil Engineering of the National Engineering College, K.R. Nagar, Kovilpatti – 628503 held on 07.05.2018 at 11.00AM in the CADD Laboratory, Department of Civil Engineering, National Engineering college. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at <a href="https://hoc.edu.in">hodcivil@nec.edu.in</a> or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely

Dr.C.PuthiyaSekar

# Department of Civil Engineering MINUTES OF THE MEETING

The 7th Meeting of the Board of studies of the Civil Engnieering was held on 7th May 2018 at 11:00 am in the CADD Laboratory in Department of Civil Engineering of the National Engineering College, K.R.Nagar, Kovilpatti- 628503

## The following members were present:

1	Dr.C.PuthiyaSekar Professor & Head	Chairman		
2	Mrs.R.Venkada Lakshmi, Asst. Prof.			
3	Mr.S.Sebastin, Asst. Prof.	Internal Members		
4	Mrs.A.LillyJoice, Asst. Prof.			
5	Mr.P.S.NaufalRizwan, Asst. Prof.			
6	Ms.S.JansiSheela, Asst. Prof.			
7	Ms.A.Gayathri, Asst. Prof.			
8	Mr.R.Sivasankar, Asst. Prof.			
9	Mr.M.Franchis David, Asst. Prof.			
10	Ms.K.MuthuPrema, Asst. Prof.			
11	Dr.K.Arunachalam, Professor and Dean (Academic), Department of Civil Engineering, Thiagarajar College of Engineering, Madurai			
12	Dr.P.Jayabalan Professor, Department of Civil Engineering, National Institute of Technology Trichy	Academic Expert		
13.	Dr.G.Elangovan, Associate Professor, Department of Civil Engineering, University College of Engineering, Pattukkottai	University Nominee		
14.	Dr.S.Selvan, Joint Chief Environmental Engineer, 76, Mount Salai, Guindy, Chennai	Industrial Expert		

15	Ms.Anushri R, Final year	Student Members	
16	Mr.Satheesh Kumar P, Final year	Student Members	

 The Industrial Expert Member Mr.C.AnanthaVignesh, Assistant Manager, Buildings & Factories Division, Larsen and Toubro Limited, Manapakkam, Chennai could not attend the meeting due to their prior commitments and unavoidable reasons and was granted leave of absence.

BoS / CIVIL 7.1		WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF CIVIL ENGINEERING
		The Chairman, BoS of the Civil Engineering welcomed and introduced the members of 7th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / CIVIL 7.2		TO CONFIRM THE MINUTES OF SIXTH BOS MEETING HELD ON 18th NOVEMBER, 2017
		The minutes of the Sixth Board of Studies meeting held on 18th November, 2017 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 8th Academic council.
BoS / CIVIL 7.3		TO CONFIRM AND APPROVE THE CURRICULUM FOR THE UG DEGREE PROGRAMME TO BE PROPOSED UNDER R-2019
		RESOLVED TO approve the Curriculum for the UG degree programme to be proposed under R-2019
BoS / CIVIL 7.4	:	ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS
		The BOS members had a discussion with the internal members regarding the proposed Curriculum under R·2019
BoS / CIVIL 7.5	:	SUGGESTIONS GIVEN BY THE BOS MEMBERS
		The Suggestios have been given in Annexure I

The members had a brainstorming discussion and interaction among themselves.

After discussion, fruitful suggestions were incorporated appropriately in the Curriculum and Syllabi.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

a) The Curriculum for B.E. Civil Engineering degree course offered under Regulations 2019.

Ms.K.Muthu Prema AP-Civil thanked all the members for their kind cooperation and the meeting came to an end.

## Members Present

Board Chairman	
Dr.C.Puthiya Sekar Professor Department of civil Engineering National Engineering college Kovilpatti.	a +6 (36tok
Internal Members	
Mrs.R.Venkada Lakshmi AP-Civil	Dard
Mr.S.Sebästin AP-Civil	J. Jely Min
Mrs.A.Lilly Joice AP-Civil	de Mut
Mr.P.S.Naufal Rizwan AP-Civil	Sminy
Ms.S.Jansi Sheela AP-Civil	81
Ms.A.Gayathri AP-Civil	Achayathan
Mr.R.Sivasankar AP-Civil	R. Surasa.
Mr.M.Franchis David AP-Civil	MD-1
Ms.K.Muthu Prema AP-Civil	Infine
Academic Experts	
Dr.K.Arunachalam , Professor & Dean (Acadamic), Department of Civil Engineering, Thiagarajar College of Engineering, Madurai – 625015.	Agamantas
Dr.P.Jayabalan Professor . Department of Civil Engineering. National Institute of Technology Trichy	P. South TELLE

University Nominees	
Dr.G.Elangovan, Associate Professor, Department of Civil Engineering, University College of Engineering, Pattukkottai – 614 701	Apr 215/16
Industrial Experts	
Dr.S.Selvan, Joint Chief Environmental Engineer, 76, Mount Salai Guindy, Chennai 32	31
Student Members Nominated by the HOD	
Ms.Anushri R –Final Civil	R. Sprushon
Mr.Satheesh Kumar P – Final Civil	P. Sathoush Frency

CHAIRMAN

BOARD OF STUDIES

#### ANNEXURE I

## SUGGESTIONS FOR REGULATION 2019 B.E CIVIL ENGINEERING I TO VIII SEMESTER CURRICULUM

- The course named Life Science in the category of Engineering Sciece courses placed in second Semester has been moved to the category Humanities and Social Sciences
- Give Number of Credits as Two for the courses Basic Mechanical Engineering and Basic Electrical and Electronics Engineering in second semester
- Give Number of Credits as One for the Laboratory Courses 1)Problem Solving Techniques Laboratory 2) Basic Electrical and Electronics Engineering Laboratory.
- The Course name can be changed according to the software that has to be used in the subject Problem Solving Techniques in Second Semester
- There is no need for Introduction to civil engineering course to civil engineering students because they will study all the contentss in the above said course in their upcoming semesters.
- The course Engineering Geology can be moved from fourth semester to third semester and that has to be moved to the category of Basic Sciences from Program Core Courses
- The course Mechanics of Solids can be moved to Engineering Sciece Course from Program Core course
- 8. The committee not recommeded that, to combine the subjects in the fifth semester as specified by AICTE i) Basic Structural Analysis ii)Basic Structural Design iii) Basic Geotechnical Engineering iv) Water and Waste water Treatment and Management
- The Committee Strongly Recommends to introduce the above merged syllabus as Individual Courses
  - a. Structural Analysis I (Method of Consistant Deformation, Slope Deflection Method, Moment Distribution Method, Influence Line diagram and Arches)
  - b. Structural Analysis II( Matrix Methods) for Basic Structural Analysis,
  - Design of Reinforced Concrete Elements (Slab, Beams, Columns, Footings, Bond Shear and Anchorage)
  - d. Design of steel structures (Connection, Tension Members, Compression Members, Flexural memebrs and Trusses)
  - e. Design of reinforced concrete and Brick Masonry Strutctures(Retaining walls, Water Tanks, Brick Masonry and Yield Line Theory) for Basic Structural Design
  - f. Soil Mechanics (Engineering Properties of Soil, Shear Strength and Slope Stability)
  - g. Foundation Engineering (Shallow foundation, Deeep Foundation and Retaining Walls)

- Environmental Engineering I (water and waste water treatment and management)
- Environmental Engineering II (Solid waste, Air and Noise Pollution Control and Management)
- 10. As per the AICTE Recommendations the structure of the UG Civil Engineering Program, The total number of Credits specified for the program core course as 47. But the BOS members recommended to maintain at least 65 credits for Program core course unless otherwise for civil engineering, we are not able to incorporate the basic subjects. For that they advised us to utilize the additional credits for the Program core courses can be adjusted through Program Elective course and open Elective course
- 11. They advised us to offer Six Program Elective Courses and Two open Elective courses.
- 12. The subjects given in the AICTE Recommendations such as Disaster mitigation and Instrumentation Techniques can be moved to Open Elective Course.