



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH SCHOOL OF BIOENGINEERING

Date: 25-01-2018

CIRCULAR

Notification for Value added courses offered by the School of Bioengineering

The Department of Bio Medical Engineering, School of Bioengineering, is scheduled to offer a Value added Course on “**Sensors and its Medical Applications**” from 05/02/2018 for a period of 3 weeks. Interested students can approach Mr.S.Prasath, Assistant Professor and Course Coordinator, Department of Bio Medical Engineering for registration and for further details on or before 02nd February 2018.

Eligibility-II, III and IV B-Tech IBT, GE and BME


Course Coordinator


HOD

Copy to:

- Vice Chancellor
- Pro Vice Chancellor
- Additional Registrar
- Deans
- CoE
- Heads of Departments



BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
SCHOOL OF BIO-ENGINEERING
DEPARTMENT OF BIO MEDICAL ENGINEERING
VALUE ADDED COURSE ON SENSORS AND ITS MEDICAL APPLICATIONS
2017-2018
COURSE CO-ORDINATOR DETAILS

Faculty Name: Mr.S.PRASATH,

Assistant Professor,

Department of Bio Medical Engineering.

Email ID: mail.surendhar@gmail.com

Mobile number: 8754581937

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
SCHOOL OF BIO-ENGINEERING
DEPARTMENT OF BIO MEDICAL ENGINEERING
VALUE ADDED COURSE SYLLABUS - 2017-2018

SENSORS AND ITS MEDICAL APPLICATIONS

UNIT 1: BASICS OF SENSING MECHANISMS IN HUMAN BODY

Study of biological sensors in human body and their basic mechanism of action - organization of nervous system- Study of various corpuscles like Pacinian - Chemoreceptors, hot and cold receptors, baroreceptors.

UNIT II: BASICS OF TRANSDUCER AND MEASUREMENT SYSTEM

Transducers- sensors: Basics, Classification, Characteristics and Choice, Primary sensing elements. Temperature transducers – thermos-resistive transducers, Radiation sensors- introduction, basic characteristics, Biomedical applications: body temperature measurement, respiration rate meter, pulse oximeter

UNIT III : CHEMICAL & BIO SENSORS

Ion exchange membrane electrodes- oxygen electrodes- CO₂ electrodes enzyme electrode - construction - ISFET for glucose, urea etc. Electrolytic sensors - optical sensor - fiber optic sensors. Microbial sensor, Enzyme immobilization of chemical analyses - Introduction to nanotechnology, Future requirements and opportunities of nanotechnology in sensing, CNT based sensors, Nano electronics and nano photonics.

Total Contact Hours: 30

SCHOOL OF BIO-ENGINEERING
DEPARTMENT OF BIO MEDICAL ENGINEERING
VALUE ADDED COURSE

SENSORS AND ITS MEDICAL APPLICATIONS

Session	Topic	Date	Duration (Hr)	Resource person
Session I	Study of biological sensors in human body and their basic mechanism of action - organization of nervous system-	05.02.2018	3	Dr.R. Vasukidevi
Session II	Study of various corpuscles like Pacinian - Chemoreceptors, hot and cold receptors, baroreceptors	06.02.2018	3	Ms. M. Maresha Mani
Session III	Transducers- sensors: Basics, Classification, Characteristics and Choice, Primary sensing elements.	07.02.2018	3	S.Prasath
Session IV	Temperature transducers – thermos-resistive transducers, Radiation sensors- introduction, basic characteristics	12.02.2018	4	Mr. M. Sundar raj
Session V	Biomedical applications: body temperature measurement, respiration rate meter, pulse oximeter	13.02.2018	3	Mr. M. Sundar raj
Session VI	Ion exchange membrane electrodes- oxygen electrodes- CO2 electrodes enzyme electrode - construction	14.02.2018	4	N.Subhalakshmi
Session VII	ISFET for glucose, urea etc. Electrolytic sensors - optical sensor	19.02.2018	3	S.Prasath
Session VIII	fiber optic sensors. Microbial sensor, Enzyme immobilization of chemical analyses	20.02.2018	3	N.Subhalakshmi
Session IX	Introduction to nanotechnology, Future requirements and opportunities of nanotechnology in sensing, CNT based sensors, Nano electronics and nano photonics.	21.02.2018	4	S.Prasath

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SCHOOL OF BIO-ENGINEERING
DEPARTMENT OF BIO MEDICAL ENGINEERING
VALUE ADDED COURSE
SENSORS AND ITS MEDICAL APPLICATIONS
STUDENTS NAME LIST 2017- 2018

S.NO	REG.NO	NAME
1.	U15BR020	BHUKYA PAVAN KALYAN
2.	U15BR021	VIDHYA SHREE E
3.	U15BR022	B. PRIYANKA
4.	U15BR023	AKILA R
5.	U15BT009	PRITAM SASMAL
6.	U15BT011	SELVA JANANI S
7.	U15BT013	VAIRAMOORTHY M
8.	U15BT014	VIJAYA LAKSHMI N
9.	U15BT015	NEHA SINGH
10.	U15BT016	PUNITHAVATHY R
11.	U15BT017	SUGANYA RAJESHWARI E
12.	U15BT019	SATHISH KUMAR.R
13.	U15BT020	VIMALANBAN S
14.	U15BT021	KALAIVANI R
15.	U15BT501	ROSHINI ESTHER A
16.	U15BT502	MARKAPURAM BHAVYA
17.	U15BM011	Denallenni E
18.	U15BM012	Divya Bharathi R
19.	U15BM013	Faizal Ahmed S
20.	U15BM014	Fathima Farsana M
21.	U15BM015	Gangapalli Sruthi
22.	U15BM016	Gayathri E.K
23.	U15BM017	Gilead Lilly R
24.	U15BM018	Jagarlamudi Mohan Sai Durga Prasad
25.	U15BM019	Javvadi Sai Rishita
26.	U16BM001	Subabalan M
27.	U16BM002	Sanjanaah Shree S
28.	U16BM003	Evangeline Elakiya Benedict E D
29.	U16BM004	Vinothraj K
30.	U16BM005	Paul Harrison J
31.	U16BM006	Siva Harish S
32.	U16BM008	Monisha R
33.	U16BM009	Devasneha D P K
34.	U16BM010	Subburam K M
35.	U16BM011	Pavithra V
36.	U16BM012	Ashini I S
37.	U16BM020	Abisha G

38	U16BM021	Chrysolite Precious Rani S
39	U16BM022	Sasikumar J
40	U16BM023	Nawaz Shariff A
41	U16BM024	Karanam Adarash Rao
42	U16BM025	Kudugunta Achyutha Reddy
43	U16BM052	Revathi N
44	U16BM065	Bellamkonda Sai Harshith
45	U16BM067	Ajitha .K
46	U15BR011	NIVETHA B
47	U15BR012	PALADI DHEERAJ
48	U15BR013	PRIYANKA P
49	U15BR014	RUSHMITHA ANBARASU
50	U15BR015	SARAH BEGUM A
51	U15BR016	SHARMILEE M
52	U15BR017	TAWFEEQ HAARIS BUHARI
53	U15BR018	TEJASVINI M
54	U15BR019	VISHALI R C
55	U16BM053	Shaik Farhana
56	U16BM054	Rakhi Dash
57	U16BM056	Nakrani Leeshna
58	U16BM057	Upputholla Rohith
59	U16BM058	Arideep Siddhanta
60	U16BM059	Naga Jagadesh Reddy
61	U16BM060	Divi Divya Sree
62	U16BM062	Divya Kerketta
63	U16BM063	Nadella Monica
64	U16BM064	Yedla Nissi Shalisha

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SCHOOL OF BIO-ENGINEERING
DEPARTMENT OF BIO MEDICAL ENGINEERING
VALUE ADDED COURSE
SENSORS AND ITS MEDICAL APPLICATIONS (2017-2018)

Students Result

S.NO	REG.NO	NAME	RESULT
1.	U15BR020	BHUKYA PAVAN KALYAN	A
2.	U15BR021	VIDHYA SHREE E	S
3.	U15BR022	B. PRIYANKA	S
4.	U15BR023	AKILA R	A
5.	U15BT009	PRITAM SASMAL	S
6.	U15BT011	SELVA JANANI S	S
7.	U15BT013	VAIRAMOORTHY M	A
8.	U15BT014	VIJAYA LAKSHMI N	S
9.	U15BT015	NEHA SINGH	S
10.	U15BT016	PUNITHAVATHY R	S
11.	U15BT017	SUGANYA RAJESHWARI E	S
12.	U15BT019	SATHISH KUMAR.R	A
13.	U15BT020	VIMALANBAN S	A
14.	U15BT021	KALAIVANI R	A
15.	U15BT501	ROSHINI ESTHER A	A
16.	U15BT502	MARKAPURAM BHAVYA	B
17.	U15BM011	Denallenni E	S
18.	U15BM012	Divya Bharathi R	S
19.	U15BM013	Faizal Ahmed S	S
20.	U15BM014	Fathima Farsana M	S
21.	U15BM015	Gangapalli Sruthi	A
22.	U15BM016	Gayathri E.K	S
23.	U15BM017	Gilead Lilly R	A
24.	U15BM018	Jagarlamudi Mohan Sai Durga Prasad	S
25.	U15BM019	Javvadi Sai Rishita	A
26.	U16BM001	Subabalan M	S
27.	U16BM002	Sanjanaah Shree S	A
28.	U16BM003	Evangelina Elakiya Benedict E D	S
29.	U16BM004	Vinothraj K	S
30.	U16BM005	Paul Harrison J	S
31.	U16BM006	Siva Harish S	S
32.	U16BM008	Monisha R	S
33.	U16BM009	Devasneha D P K	S
34.	U16BM010	Subburam K M	A
35.	U16BM011	Pavithra V	S
36.	U16BM012	Ashini I S	A
37.	U16BM020	Abisha G	S
38.	U16BM021	Chrysolyte Precious Rani S	A
39.	U16BM022	Sasikumar J	A

40	U16BM023	Nawaz Shariff A	A
41	U16BM024	Karanam Adarash Rao	A
42	U16BM025	Kudugunta Achyutha Reddy	B
43	U16BM052	Revathi N	A
44	U16BM065	Bellamkonda Sai Harshith	B
45	U16BM067	Ajitha .K	A
46	U15BR011	NIVETHA B	B
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48	U15BR013	PRIYANKA P	B
49	U15BR014	RUSHMITHA ANBARASU	B
50	U15BR015	SARAH BEGUM A	S
51	U15BR016	SHARMILEE M	A
52	U15BR017	TAWFEEQ HAARIS BUHARI	S
53	U15BR018	TEJASVINI M	B
54	U15BR019	VISHALI R C	S
55	U16BM053	Shaik Farhana	A
56	U16BM054	Rakhi Dash	S
57	U16BM056	Nakrani Leeshna	A
58	U16BM057	Upputholla Rohith	A
59	U16BM058	Arideep Siddhanta	S
60	U16BM059	Naga Jagadesh Reddy	A
61	U16BM060	Divi Divya Sree	A
62	U16BM062	Divya Kerketta	S
63	U16BM063	Nadella Monica	A
64	U16BM064	Yedla Nissi Shalisha	S

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DEPARTMENT OF BIOMEDICAL ENGINEERING

Name : VIDHYA SHREE E


Register Number : VISBR201

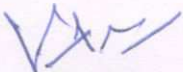
Academic year: 2017-2018

Name of the course offered : sensors & its medical Applications

Student Feedback

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course content	✓				
2	Skill development		✓			
3	Motivation		✓			
4	Regularity of the faculty	✓				
5	Coverage of the syllabus	✓				
6	Resourse person interaction with students	✓				
7	Outcome		✓			
8	Individual Attention	✓				


Signature of the Course co-ordinator


Signature of the Student

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DEPARTMENT OF BIOMEDICAL ENGINEERING

Name : *Ajitha K*


Register Number : *V16BM064*

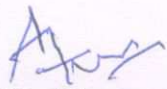
Academic year: *2017-2018*

Name of the course offered : *sensors & its medical Applications*

Student Feedback

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course content		✓			
2	Skill development		✓			
3	Motivation	✓				
4	Regularity of the faculty		✓			
5	Coverage of the syllabus	✓				
6	Resourse person interaction with students			✓		
7	Outcome			✓		
8	Individual Attention	✓				


Signature of the Course co-ordinator


Signature of the Student



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NAAC

NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL



SCHOOL OF BIO ENGINEERING CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms BHUKYA PAVAN KALYAN has completed the value added course on "Sensors and its Medical Applications" organized by the Department of Biomedical Engineering, Bharath Institute of Higher Education and Research, Chennai (TN), India during 05th February to 21st February, 2018.

Dean

HOD

Chennai

14-03-2018

From

The Head of the Department

Department of Biomedical Engineering

BIHER

To

The Dean

BIHER

Respected Sir,

Sub: Approval to conduct a value added course on "**Calibration and Testing of Biomedical Equipments**" -reg

It has been planned by the Department of Biomedical Engineering to start a Value Added Course on "**Calibration and Testing of Biomedical Equipments**" for the benefit of B.Tech Biomedical Engineering, B.Tech Industrial Biotechnology and B-Tech Genetic Engineering students from 26th March, 2018. The duration of the course is 30 hrs comprising of both theory and practical classes. I request you to kindly approve for the same.

Thanking you,

Yours sincerely

