



THE NATIONAL INSTITUTE OF ENGINEERING

(An Autonomous Institution)
(Affiliated to V.T.U., Belgaum & Accredited by NBA New-Delhi)
Manandavadi Road, Mysore - 570008.



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

Phone: 0821-2480475, 2481220, 4004900 Fax: 0821-2485802, E-mail: principal@nie.ac.in, Website: www.nie.ac.in

Dr. P Devaki, M.Tech, PhD
Professor & Head of Department

August 19, 2020

Board of Studies (BoS)

Date: 19-Aug-2020

Mode of Conduction: Google Meet

Time: 11.30 AM to 1 PM

Members Present:

SI No.	Name	Organization	Designation	Signature
1	Dr. P Devaki Prof. & HOD	The National Institute Of Engineering, Mysuru	Chairman	
2	Dr. K Raghuvver Prof. & IQAC Head	The National Institute Of Engineering, Mysuru	Internal Member	
3	Dr. S Kuzhalvaimozhi Professor	The National Institute Of Engineering, Mysuru	Internal Member	
4	Sri. Rampur Srinath Associate Prof.	The National Institute Of Engineering, Mysuru	Member Secretary	
5	Sri. CN Chinnaswamy Associate Prof.	The National Institute Of Engineering, Mysuru	Internal Member	
6	Smt. BM Nandini Assistant Prof.	The National Institute Of Engineering, Mysuru	Internal Member	
7	Sri. N Rajesh Assistant Prof.	The National Institute Of Engineering, Mysuru	Internal Member	
8	Dr. P Santhi Thilagam, Prof, Dept. of CS & E	NITK, Surathkal	External Member	Present
9	Dr. Uma B Prof. & HoD, Dept. of IS & E	MCE, Hassan.	External Member	Not Present
10	Dr. Y C Kiran Chandrappa, Prof., Dept of CS & E.	GAT, Bangalore. (VTU NOMINEE)	VTU Nominee	Present
11	Sri. Manjit S Sodhi	IBM, Manyata Embassy Business Park	Industry Expert	Present
12	Sri. Phanindra Mankale Software Development Manager, Alexa AI & Natural Understanding	Amazon India Pvt. Ltd, Bengaluru.	Industry Expert	Present
13	Mr. Nachiket CEO	Entelika Consultancy & IT Services	Alumnus	Present

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PROCEEDINGS OF THE MEETING

At the beginning, the Chairman of Board of Studies, Dr. P Devaki, Prof. & HoD, Dept. of IS & E, welcomed and introduced all the members. The Chairman appreciated the members for attending the online meeting of the Board of Studies for the academic year 2020-2021.

Agenda and Resolution:

1. Read and record the minutes of previous BoS meeting held on May 4, 2019 and about the action taken.

Resolution: Read and Recorded.

The Board noted and also expressed its satisfaction on the action taken.

To Consider or Approval of the following:

2. a. Discussion on DIAB, DAAB, outgoing student feedback
Resolution: Recorded and Approved

- b. Blown up syllabus of 3rd year of 2018-19 Admission Batch, and
 - Introducing new elective subject in 3rd year for the UG programme under Dept. Elective -1 from the Academic year 2020- 2021
 - Dept. Elective -1 → IS6E105 - UX & UI**Resolution:** Approved and Recommended to Academic Council for further action

- c. Change of Syllabus

- UG - 3 Semester - Discrete Mathematics & Graph Theory (IS3C01) - Core
 - 4 Semester - Object Oriented Programming with Java (IS4C04) - Core
 - 7 Semester - Wireless Communication and Networks (IS0315) - Elective
- Resolution:**
- Approved and Recommended to Academic Council for further action

- d. List of Value added courses to be approved - UG

Resolution: Approved and Recommended to Academic Council for further action

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e. BE - honors degree course list - UG

Resolution: Approved and Recommended to Academic Council for further action

f. Introducing new elective subjects for the PG programme from the Academic year 2020-2021

- Dept. Elective -3 → MCN2E306 - Social Networks
- Industry Driven Elective → MCN2I02 - Introduction to Machine Learning
- Open Elective → MCN3003 - Mobile Application Development

Resolution: Approved and Recommended to Academic Council for further action

g. Change of Syllabus

- PG - 1 Semester - Research Methodology (MCN1CRM) - Core

Resolution: Approved and Recommended to Academic Council for further action

h. List of Value added courses to be approved - PG

Resolution: Approved and Recommended to Academic Council for further action

Discussions and Suggestions from Members:

- Sri. Phanindra Mankale queried where Agile software development topic is being taught.

Resolution: Clarified that Agile software development topic is taught in 4th semester, Software Engineering course.

- Sri. Phanindra Mankale queried where working of web topic is being taught.

Resolution: Clarified, this topic is covered in Web technology course with laboratory component in 6th semester.

- Sri. Manjit S Sodhi queried whether Internet of Things topic is part of the Microprocessor Course

Resolution: Clarified, Internet of Things is offered as an industry driven elective course by Nokia Pvt. Ltd Company for the 7th semester students.



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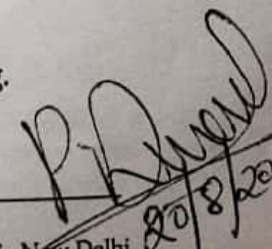


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- **Sri. Phanindra Mankale** suggested to have Blockchain technology as a course in the curriculum
Resolution: Clarified, Blockchain technology course is offered as a value added course, once content of the syllabus and textbook will be finalized, the course will be offered as a core or elective
- **Sri. Phanindra Mankale** queried whether the Machine Learning course is being taught considering the industry requirement.
Resolution: Clarified by Nachiket, Alumnus and member of BoS, who had taught the Machine Learning course for PG students under Industry driven elective.
- **Sri. Phanindra Mankale** suggested to have Natural Language Processing, Linear Algebra, Computer Vision topics under Machine learning course which is essential and required in industry.
Resolution: Noted and steps will be taken for including the said topics / courses.
- **Sri. Manjit S Sodhi** suggested to Design python programming course related to machine learning, Data science and analytics, Functional Programming, MongoDB.
Resolution: Clarified that Python programming course is offered as MOOC elective from NPTEL, and further steps will be taken for including the said topics when offered as value added course or as department elective.
- **BoS Members** suggested to have stream oriented electives having continuity in subsequent semester, considering the recent trends and technologies.
Resolution: Noted and steps will be taken for introducing the stream oriented electives
- **Dr. P Santhi Thilagam** suggested to have Software defined networks as a new course
Resolution: Clarified, it is listed in MOOC elective, further steps will be taken to include this course as a core or elective.
- **Dr. P Devaki**, Chairman, BoS, proposed vote of thanks at the end of the meeting.

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20/8/20
PROFESSOR & HEAD
Dept. of Information Science & Engg
National Institute of Engineering
MYSORE-570008



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• **Approval required for the following:**

a. Programme outcome Assessment

Resolution:


b. Re-revised scheme for Curriculum of M.Tech from 2020-2021 Academic Year (2020-21 Admission Batch)

Semester	Credit Distribution	Total Credits	Remarks
I	Same as Previous year	27	No Change
II	Same as Previous year	27	No Change
III	MOOC Elective (12 Weeks) Management Department	3	No Class room intervention in III semester. Students have to satisfy the necessary criteria for the award of internship credits.
	Open Elective (MOOC) (8 Weeks) from Other Department	2	
	Seminar	1	
	Internship	5	
	Project Phase - I	8	
IV	Project Phase - II	15	15
Total Credits		88	

Resolution:

c. Restrict the paper setting for MOOC elective by internal faculty assigned only, than the external paper setter.

Resolution:


Prof. & Head. 24/8/2020

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UX & UI (3:0:0)

Sub code : IS6E105
Hrs/week : 03
SEE Hrs : 03

CIE : 50 Marks
SEE : 50% Marks
Max. Marks: 100

Course Outcomes:

On Successful completion of the course, the students will be able to:

1. Describe the concepts of User interface patterns
2. Illustrate different features, approach and pattern of User Interface / User Experience (Module 2 & 3)
3. Discuss the effects of Wearable devices on health and environment.
4. Describe continuous and complementary design approach in developing interfaces

MODULE 1:

8 Hrs

What Users Do: A Means to an End, the Basics of User Research, Users' Motivation to Learn, The Patterns – Safe Exploration, Instant Gratification, Satisfying, Changes in Midstream, Deferred Choices, Incremental Construction, Habituation, Micro breaks, Spatial Memory, Prospective Memory, Streamlined Repetition, Keyboard Only.

Self Learning Exercise: Other People's Advice, Personal Recommendations.

MODULE 2:

8 Hrs

Information Architecture and Application Structure: The Big Picture, The Patterns – Feature, Search and browse, News Stream, Picture Manager, Dashboard, Canvas Plus Palette, Wizard Setting Editor, Alternative Views, Many Workspaces, Multi-Level Help Making it Look Good: Visual Style and Aesthetics: Same content, Different styles, The Basics of Visual Design, What This Means for Desktop Applications, The Patterns: Deep Background, Few Hues, Many Values, Corner Treatments, Borders That Echo Fonts, Hairlines.

Self Learning Exercise: Contrasting Font Weights, Skins and Themes

MODULE 3:

8 Hrs

Design and UX: Users Vs Life Cycles, Visual Design, Web standards, Potential Barriers to sustainable UX, Designing for Emerging Technologies: Design for Disruption, Eight Design Tenets for Emerging Technology, Changing Design and Designing Change, Fashion with Function: Designing for wearable devices, The next big wave in Technology, The wearable market segments.

Self Learning Exercise: UX (and Human) Factors to consider

MODULE 4:**8 Hrs**

An Ecosystem of connected device: The concept of an Ecosystem, The 3Cs Framework: Consistent, Continuous and Complementary, Single Device Design is History, It's an Eco system, The Consistent Design Approach: What is consistent Design, Consistency in Minimal Interface, Progressive Disclosure in Consistent Design.

Self Learning Exercise: Beyond Device Accessibility

MODULE 5:**7 Hrs**

The Continuous and Complementary Design Approach: The continuous Design Approach: What is Continuous Design? Single Activity flow and the Sequenced Activity Flow. What is Complementary Design? Collaboration: Must-Have, Collaboration: Nice to have, Control: Nice to Have, Fascinating Use Cases: What do they mean for my work? Integrated Design Approaches: 3 Cs as building blocks.

Self Learning Exercise: Beyond the Core Devices: The Internet of Things.

TEXT BOOKS:

1. Jenifer Tidwell, "Designing Interfaces", 2nd Edition, Oreilly, 2015.
2. Jonathan Follet, "Designing for Emerging Technologies- UX for Genomics, Robotics and The Internet of Things", 1st Edition, Oreilly, 2014.
3. Michal Levin, "Designing Multi-Device Experiences", 1st Edition, Oreilly, 2014.
4. Tim Frick, "Designing for Sustainability", 1st Edition, Oreilly 2016.

REFERENCE BOOKS:

1. Ben Shneiderman, Plaisant, Cohen, "Jacobs: Designing the User Interface", 5th Edition, Pearson Education, 2010
2. Unger and Chandler, "A Project Guide to UX Design", 2nd Edition, New Riders, 2012