NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA
SURATHKAL

MINUTES

OF

THIRTY SIXTH MEETING OF
BOARD OF STUDIES

Date   :   **08.11.2021 (Monday)**
Time   :   **3.00 PM**
                    Through Google Meet

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

Minutes of the Thirty Sixth combined Board of Studies (UG, PG & Research) Meeting held on Monday, November 08, 2021 through google meet.

MEMBERS PRESENT

1)	Dr. Vidya Shetty K.	...	Chairman
2)	Mr. K. Ravindranath	...	Member
3)	Dr. M. S. Bhat	...	Member
4)	Dr. Narendranath S.	...	Member
5)	Dr. K. Manjunath Sharma	...	Member
6)	Dr. Ashivni Chaturvedi	...	Member
7)	Dr. Shashidhar Koolagudi	...	Member
8)	Dr. Jaidhar C.D	...	Member
9)	Dr. Gururaj Punekar	...	Member
10)	Dr. Jagadeesh Babu	...	Member
11)	Dr. S.M. Kulkarni	...	Member
12)	Dr. B.R. Jayalekshmi	...	Member
13)	Dr. B.M. Doddamani	...	Member
14)	Dr. Narayan Prabhu	...	Member
15)	Dr. M. Aruna	...	Member
16)	Dr. Ajith K.	...	Member
17)	Dr. Uday Kumar Dalimba	...	Member
18)	Dr. R. Madhusudhan	...	Member
19)	Dr. Rajesh Acharya	...	Member
20)	Dr. M. Vasudev	...	Member
21)	Dr. Mallikarjun Angadi	...	Member
22)	Ms. Sandhya AR (Academic)i/c	...	Secretary

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

CONTENTS

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

Minutes of Thirty Sixth (36th) BOS meeting held on 08.11.2021 (Monday) at 3.00 pm by virtual mode

The Chairman (BOS) and Dean (Academic) chaired the meeting and welcomed all the members to the **Thirty Sixth BOS meeting.**

The minutes of **Thirty Fifth BOS** meeting was approved as there were no comments received from the members.

36-BOS-1: **Modification in B. Tech Regulations**

The BOS discussed on the revisions in B.Tech regulations and Curriculum that are proposed based on the recommendations of the Committee to formulate the framework for implementation of NEP-2020 (To be effective from AY 2021-22).

Item title	Proposal of the Committee set up to formulate the framework for implementation of NEP-2020	BOS Resolutions on the Proposed Revision in B.Tech regulations and Curriculum	
BOS 36.1.1 **Introduction of liberal arts into B.Tech**	This is being done to impart multi-disciplinary and holistic education with no hard separations as proposed in the NEP 2020 document; the institute plans to introduce liberal arts along with making provisions for not drawing a rigid distinction between co-curricular and extra-curricular activities. Additional credits over and above degree requirement in the form of S/N may be introduced. Eg., if 150 credits are required for B.Tech, then it could be increased to make it 150+10. 10 for liberal	**The BOS resolved to recommend the introduction of a Mandatory Learning course (MLC) on Liberal arts courses/cocurricular/extracurricular activities".** B. Tech students are required to earn **minimum 10 credits** under "Liberal arts courses/cocurricular/extracurricular activities" which are categorized as Mandatory Learning courses (MLC) . It is resolved to recommend that this course may be offered by Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) functioning under Dean (Student Welfare). It is recommended that the course may be assigned a Course code of **SA 401**. The Liberal arts courses /cocurricular /extracurricular activities are	For Senate Approval

arts, some of it could come from sports and club activities also. An alternate recommendation is that we can throw open the electives and students can get credits from MOOCs in liberal arts counted towards electives. This alternative would be beneficial, if we consider the other changes that are being proposed.

recommended to be categorized as follows:

CATEGORY A : Sports/club activities/organizing Institute level programmes/NSS - **Maximum 3 credits** may be earned under this category of activities with credit allocation as follows:

- Participation in club activities /NSS/ competitions held by the club –1 credit per participation
- Member of a Club -2 credits per membership
- Organizing team members of Institute events like INCIDENT/Engineer /club office bearers -3 credits per membership
- Participation in state/National /International level competitions/paper presentation/Model building competitions -- 3 credits / participation

All the certificates under this category are to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration, through the faculty advisor for the respective club/Committee and further to be approved by Dean (SW).

CATEGORY B: NCC or YOGA courses offered by the Institute - Maximum 3 credits.

Certificates under this category are to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed

as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration, through NCC Officer/Yoga Instructor of the Institute, as applicable and further to be approved by Dean (SW).

CATEGORY C: Certified courses in Languages /Fine arts - Maximum 7 credits may be earned under this category.

The certificates issued by authorized certification bodies to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration and further to be approved by Dean (SW).

The courses/activities under "Liberal arts courses/co-curricular/ extra-curricular activities" may be taken during the period from 1st semester to 7th Semester B.Tech at student's convenience. However registration for these courses have to be done in the seventh semester. The certificates may be submitted by the student to the Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities)with due forwards, recommendations and approvals from the appropriate authority as specified above.

The procedure and the time of submission of the certificates may be framed by the Department of Physical Education and Sports (Proposed to be renamed as

		Department of Physical Education, Sports and Student activities)with approval from Dean(SW). A consolidated grade sheet for all the registered students for each of the B Tech programme, mentioning the credits earned in each category and the total credits with S/N grades may be sent in a prescribed format to the to the Office of Dean (Academics) by the Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities)with approval from Dean(SW). The prescribed format may be made available in Curriculum book.	
BOS 36.1.2 Introduct ion of corner stone, Capstone project	To inculcate creativity and critical thinking to encourage logical decision-making and innovation it is proposed to encourage students to take up corner stone projects which shall culminate in Capstone projects. In many departments there are students who on their own volition, do projects from second year onwards, even working through summer holidays. This may be encouraged so that students at an early stage can come up with ideas, work on them through the years and make it into a successful one which could later be a seed to	**The BOS resolved to recommend the introduction of a cornerstone/capstone project in the curriculum, offered as an elective** with 4 credits. For such projects, the student has to register in his/her department in the beginning of 3rd semester. The registration details of such students are to be maintained in the Department. The student should work on this project from 3rd semester to 7th semester. The student has to submit a report to the department at the end of every semester and present the work progress to a duly constituted committee. Formally the registration for this course has to be done in the seventh semester and the student has to submit a final report at the end of seventh semester. The assessment will be done at the end of seventh semester by a duly constituted committee at the department level, with the guide as a member. This	**For Senate Approval**

	a startup. Every department should encourage students to take up such corner stone projects which could culminate in a cap stone project. To incentivize students to take up such projects, credits may be assigned and set against electives.	course may have a course code specified by the Department.	
BOS 36.1.3 Introduction of a Design course in the first year	To enhance creativity and critical thinking, it is proposed to include engineering design at the entry level so that the students learn the process of creating something and also learn how to make it happen. This enhances both their creativity and critical thinking.	**The BOS resolved to recommend the introduction of a Mandatory learning course on Introduction to Design Thinking (ME 100): (2-0-0) 2 Credits.** This course will be coordinated by Mechanical Engg. Department, with course instructors from the various B.Tech Programme offering Departments. The student is required to complete this course during 1st/ 2nd semester.	For Senate Approval
BOS 36.1.4 Introduction of 'MINOR' in niche areas.	Eg., in Machine Learning, in Data Science, in Automobile engineering, to name a few. This would also provide flexibility for students to choose their programs according to their talents. Extending on this idea of another Minor being offered by departments, E&C can offer one in Communication, E&E can offer one in Embedded Systems, CH in Biotechnology, CSE on Cyber Security, cloud computing, computer k, SOM on	**The BOS resolved to recommend the provision of the following three types of Minor programmes** in the curriculum **A student in a particular discipline can take additional specified courses totaling 15 to 20 credits for,** (a) **Minor in other disciplines where all the courses are offered by a department other than his/her parent department** or (b) **Interdisciplinary Minor where courses are offered by two or more departments and may be opted by student of any discipline**	For Senate Approval

	Economics, MACS on Data Science, CV in Structures, Geotechnical, Transportation, Remote sensing, water resources, marine structures; ME on thermal sciences, Mechatronics, automobile engineering, etc. This list is only indicative and not exhaustive.	**or** **(c) Minor in Niche areas in his/her parent discipline**	
BOS 36.1.5 Introduction of Python programming.	Python programming may be introduced to first year students instead of C programming, as most of the B.Tech students require exposure to application software domain rather than system software domain, except in the case of CSE and IT. The course could be Introduction to programming and data structures	Presently, the following Computer programming courses are to be completed by all the students in 1st /2nd semesters of B.Tech under Engineering Science Core CS110 Computer Programming (3-1-0) 4 CS111 Computer Programming Lab (0-0-2)1 **The BOS resolved to recommend that the departments** may be given an option of specifying a set among the following sets of two courses as part of Computer programming courses at the first year level under Engineering Science Core for the B. Tech programme offered by their Department: Set 1 (The existing Computer Programming theory and lab courses which are renamed and with restructured L-T-P credits) CS 110 C Programming (3-0-0) 3 CS111 C Programming Lab (0-0-3) 2 Set 2 CS 100 Python programming (3-0-0) 3 CS 101 Python programming lab (0-0-3) 2	**For Senate Approval**

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

36-BOS-2: Modification in B. Tech Regulations: As a consequence of the proposed Revisions in the curriculum to accommodate the recommendations of the Committee to formulate the framework for implementation of NEP-2020, following changes in the Clauses in Regulations/Inclusion of syllabus for the newly introduced courses in the Curriculum were proposed (To be effective from AY 2021-22)

The BOS resolved to recommend the following modifications in B.Tech Regulations to be effective from AY 2021-22.

Item	Existing	Proposed	
BOS.36.2.1 Changes B.Tech Course structure: **Modification in Clause 3.1**	**Curriculum 2020 – B.Tech Regulations :Clause 3.1.** The total course package for a B.Tech Degree Programme will typically consist of the following components. (a) Foundation Courses FC 38 –50 Credits A Foundation Course can be any of the following: Basic Science Core Courses (BSC), Engineering Science Core Courses (ESC), and Humanities and Social Science Core Courses (HSC) (b) Programme Core Courses PC ≥ 60 Credits (c) Elective Courses ELE ≥ 20 Credits An Elective Course can be any of the following: Programme Specific Electives (PSE), Certified MOOCs (NPTEL/SWAYAM etc.) and Mini Projects.	In order to facilitate the Introduction of "Liberal arts courses /cocurricular / extracurricular activities" as MLC course with 10 credit requirement, a MLC on Introduction to Design Thinking, **BOS resolved and recommended** that the minimum Total Credit requirement for B.Tech Programme may be increased from the present range of 150-160 to 160-170 credits. The MLC credit requirement may be increased from 5 credits to 16 credits **BOS recommended the following Changes in Clause 3.1 - B.Tech Regulations from AY 2021-22** The total course package for a B.Tech Degree Programme will typically consist of the following components. (a) Foundation Courses FC 38 –50 Credits A Foundation Course can be any of the following:	**For Senate Approval**

	(d) Project (Mini Projects and Major Project) MP 4 - 6 Credits (e) Mandatory Learning Courses MLC **5 Credits** **The Minimum Credit Requirement for the B.Tech Degree is 150 to 160**	Basic Science Core Courses (BSC), Engineering Science Core Courses (ESC), and Humanities and Social Science Core Courses (HSC) (b) Programme Core Courses PC ≥ 60 Credits (c) Elective Courses ELE ≥ 20 Credits An Elective Course can be any of the following: Programme Specific Electives (PSE), Certified MOOCs (NPTEL/SWAYAM etc.), Mini Projects **and Cornerstone /capstone project.** (d) Project (Mini Projects and Major Project) MP 4 - 6 Credits (e) Mandatory Learning Courses MLC **16 Credits** **The Minimum Credit Requirement for the B.Tech Degree is 160 to 170**	
BOS.36.2.2 **Modificat-ion in Clause 3.2**	**Curriculum 2020 - B.Tech Regulations : Clause 3.2.** The students have the option to register for certified MOOC courses (NPTEL/SWAYAM etc.) limited to 5 credits. **Project (MP)** Project work may consist of Major Project and Mini Projects (optional) offered by	**The BOS resolved to recommend the following modification in Curriculum – B.Tech Regulations : Clause 3.2 from AY 2021-22** **Certified MOOC courses** The students have the option to register for certified MOOC courses (NPTEL/SWAYAM etc.) **limited to 8 credits for their elective credit requirement.**	**For Senate Approval**

parent department. The Major Project is a course with 4- 6 credits and can comprise of Part I and Part II, spread over 1 or 2 semesters of final year, preferably during 7th and 8th semesters. DUGC may prescribe Mini Project as a requirement for the B. Tech Degree or in lieu of equivalent elective credits. The method of evaluation for major and minor projects shall be evolved by pertinent DUGC and appropriate double-letter grade is awarded which will be considered for SGPA and CGPA calculation

Mandatory Learning Courses: These are courses that must be completed by the student at appropriate time. The 'S' grade is awarded for satisfactory completion of the course and 'N' grade is awarded for non-completion of the course. The 'S' and 'N' grades do not carry grade-points and hence not included in the SGPA, CGPA computations

Courses that come under this category are the following:
 (a) *Environmental Studies*: This is a 1 credit course, coordinated by Department of Civil Engineering and the student is required to complete this course during 1st / 2nd semester

  (b) Professional Ethics and Human Values: This

The students also have the option to register for certified MOOC courses (NPTEL /SWAYAM etc.), limited to 7 credits for MLC credit requirement towards the completion of the MLC course on "Liberal arts courses/ cocurricular / extracurricular activities".

Credits earned through certified courses will not be used for SGPA/CGPA computations. However, these credits will be considered for elective/MLC credits requirements of the programme.

A student must provide all the details (original or attested authentic copies) such as course content, number of contact hours, course instructor and evaluation system for the certified course which he/she requests to be considered in order to fulfil the designated credit requirement.

These details will be evaluated by the concerned DUGC (for Elective credit requirement) before giving the approval. The DUGC will then decide the number of equivalent credits the student will get for such course(s) in NITK. The complete details will then be forwarded to Dean (A) for

is a 1 credit course, coordinated by School of Management and the student is required to complete this course during 1st/ 2nd semester

(c) *Seminar*: The student will make presentations on topics of academic interest

(d) *Practical Training*: The student may complete the training before the beginning of the 7th semester (or as stipulated by the DUGC) and register for it in 7th Semester. The duration and the details shall be decided by the Faculty Advisor with approval from DUGC

approval.

The details of MOOC courses towards Category C of MLC course on Liberal arts courses/ cocurricular/ extracurricular activities" will be evaluated by Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) and it will then decide the number of equivalent credits the student will get for such course(s) in NITK. The complete details will then be forwarded to Dean (A) for approval with recommendations of Dean (SW).

Project (MP)
Project work may consist of Major Project and Mini Projects (optional) offered by parent department. The Major Project is a course with 4- 6 credits and can comprise of Part I and Part II, spread over 1 or 2 semesters of final year, preferably during 7th and 8th semesters. DUGC may prescribe Mini Project as a requirement for the B. Tech Degree or in lieu of equivalent elective credits. The method of evaluation for major and minor projects shall be evolved by pertinent DUGC and appropriate double-letter grade is awarded which will

		be considered for SGPA and CGPA calculation **Cornerstone/capstone Project:** **The students have the option to register for Cornerstone/capstone Projects offered by departments as an elective. For such a project, the student has to register in his/her department in the beginning of 3rd semester. The registration details of such students are to be maintained in the Department. The student has to work on this project under the supervision of a faculty member from 3rd semester to 7th semester. The student has to submit a report to the department at the end of every semester and work progress may be assessed by a duly constituted committee at the department level, with the guide as a member at the end of every semester. Formally the registration for this course has to be done in the seventh semester and the student has to submit a final report at the end of seventh semester. The assessment to be done at the end of seventh semester by a duly constituted committee at the department level, with the guide as a member.**	

Mandatory Learning courses: These are courses that must be completed by the student at appropriate time. The 'S' grade is awarded for satisfactory completion of the course and 'N' grade is awarded for non-completion of the course. The 'S' and 'N' grades do not carry grade-points and hence not included in the SGPA, CGPA computations.

Courses that come under this category are the following:

(a) *Environmental Studies:* This is a 1 credit course, coordinated by Department of Civil Engineering and the student is required to complete this course during 1st / 2nd semester.

(b) *Professional Ethics and Human Values:* This is a 1 credit course, coordinated by School of Management and the student is required to complete this course during 1st/ 2nd semester

(c) *Seminar:* **1 credit.** The student will make presentations on topics of academic interest.

(d) ***Practical Training***: **1 Credit**. The student may complete the training before the beginning of the 7th semester (or as stipulated by the DUGC) and register for it in 7th Semester. The duration and the details shall be decided by the Faculty Advisor with approval from DUGC.

		(e) **Introduction to Design Thinking (ME 100): (2-0-0) 2 Credits.** **This course will be coordinated by Department of Mechanical Engg., with course instructors** from the various B.Tech Programme offering Departments. **The student is required to complete this course during 1st/ 2nd semester.** (f) **"Liberal arts courses /co-curricular/extracurricular activities": This is a 10-credit course. The students are required to earn minimum 10 credits under "Liberal arts courses/co-curricular /extracurricular activities"** The Liberal arts courses/ cocurricular/extracurricular activities may be categorized as follows: CATEGORY A: Sports/club activities/organizing Institute level programmes/NSS - Maximum 3 credits may be earned under this category of activities with credit allocation as follows: **Participation in club activities /NSS/ competitions held by the club –1 credit per participation** **Member of a Club -2 credits per membership** **Organizing team members of Institute events like INCIDENT/ Engineer/club office**

			bearers - 3 credits per membership • **Participation in state/National /International level competitions /paper presentation/Model building competitions -- 3 credits / participation** All the certificates under this category are to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration, through the faculty advisor for the respective club/Committee and further to be approved by Dean (SW). **CATEGORY B: NCC or YOGA courses offered by the Institute - Maximum 3 credits.** The certificates under this category are to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration, through NCC Officer/Yoga Instructor of the Institute, as applicable and further to be approved by Dean (SW).	

CATEGORY C: Certified courses in Languages /Fine arts - Maximum 7 credits may be earned under this category.

The certificates issued by authorized certification bodies to be submitted by the student to Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities) clearly specifying the category for consideration and further to be approved by Dean (SW).

The courses/activities under "Liberal arts courses/co-curricular/extracurricular activities" may be taken during the period from 1st semester to 7th Semester B.Tech at student's convenience. However registration for these courses have to be done in the seventh semester. The certificates may be submitted by the student to the Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities)with due forwards, recommendations and approvals from the appropriate authority as specified above.

The procedure and the time of submission of the certificates may be framed by the Department of Physical

		Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities)with approval from Dean(SW). A consolidated grade sheet for all the registered students for each of the B Tech programme, mentioning the credits earned in each category and the total credits with S/N grades may be sent in a prescribed format to the Office of Dean (Academics)by the Department of Physical Education and Sports (Proposed to be renamed as Department of Physical Education, Sports and Student activities)with approval from Dean(SW).	
BOS.36.2.3 Deletion of Clause 3.4	**Curriculum 2020 -B .Tech Regulations: Clause 3.4.** *Co-curricular and/or Extra-curricular activities:* These are noncredit courses, with multiple options, to be completed at student's convenience. The student shall complete *a total of at least 2* items (with *at least one from each of the two groups*) described below. On successful completion, a **certificate** regarding the activity that a student has participated in, may be issued by the Faculty in-charge of that particular activity. With the recommendation of the Faculty in-charge of Co-Curricular / Extra-Curricular	**In view of inclusion of "Liberal arts courses /co-curricular/ extracurricular activities" in Clause 3.2, The BOS resolved to recommend the deletion of Clause 3.4 in Curriculum 2020-B.Tech Regulations from the AY-2021-22.**	**For Senate Approval**

	Activities, the Dean (Students Welfare) may approve the **Report of Satisfactory Completion of such Co-Curricular and Extra-Curricular Activities.** The Co-curricular/Extra-curricular Activities are compulsory degree requirements. **Group 1: Co-Curricular Activities,** which includes activities in professional societies like IEEE, ISTE, IE, CSI, Department Associations, Lab development, Participation in Paper Presentation, Model Building, etc. **Group 2: Extra-Curricular Activities,** such as NSS, NCC, NSO, Community Services, Social work, Yoga, Meditation, Language Course, Health Care Services, Activities in Alumni Association, Activities in *INCIDENT, Engineer,* Participation in Sports, Games, Various Clubs of Institute, SPICMACAY, etc.		
BOS.36.2.4 Modification in Clause 3.5	**Curriculum 2020 -B.Tech Regulations : Clause 3.5** **Lower and Upper Limits for Course Credits Registered in a Semester/Session, by a Full time Student of the B.Tech. Degree Programme:** A full time student of the	The BOS resolved to recommend the following modifications in Clause 3.5 of B.Tech Regulations in Curriculum 2020 from AY 2021-22 **Lower and Upper Limits for**	For Senate approval

	B.Tech. degree programme must register for a minimum of 12 credits, and up to a maximum of 30 credits. However the minimum/maximum credit limit can be relaxed by the Dean (Academic) on the recommendations of the DUGC, only under extremely exceptional circumstances. The maximum credits that a student can register in a Summer session is 16.	**Course Credits Registered in a Semester/Session, by a Fulltime Student of the B.Tech. Degree Programme:** A full time student of the B.Tech. degree programme must register for a minimum of 12 credits, and up to a maximum of 30 credits. However the minimum/maximum credit limit can be relaxed by the Dean (Academic) on the recommendations of the DUGC, only under extremely exceptional circumstances. The maximum credits that a student can register in a summer session is 16. **The 10 credits of Liberal arts courses, extra-curricular and co-curricular activities (Registered in the 7th semester) are exempted from the count towards the minimum and maximum limit of credits per semester.**	
BOS.36.2.5 **Modification in first year course list and suggested plan of study**	**First Year Bachelor of Technology** **List of Courses Common to All Undergraduate Programmes Foundation Courses (FC)** **Basic Science Core (BSC)** MA110 Engineering Mathematics – I (3-0-0) 3 MA111 Engineering Mathematics –II (3-0-0) 3 PH110 Physics (3-1-0) 4 PH111 Physics Laboratory (0-0-2) 1 CY110 Chemistry (3-0-0) 3 CY111 Chemistry (0-0-3) 2	The BOS resolved to recommend the following modification in the First Year curriculum as proposed. **First Year Bachelor of Technology** **List of Courses Common to all Undergraduate Programmes Foundation Courses (FC)** **Basic Science Core (BSC)** MA110 Engineering Mathematics – I (3-0-0) 3 MA111 Engineering (3-0-0) 3	For Senate approval

Left Column	Right Column
Laboratory	Mathematics – II

Left column:

Engineering Science Core (ESC)

WO110	Engineering Mechanics	(3-0-0) 3
ME111	Engineering Graphics	(1-0-3) 3
CS110	Computer Programming	(3-1-0) 4
CS111	Computer Programming Lab	(0-0-2) 1

Humanities and Social Science Core (HSC)

SM110	Professional Communication	(3-0-0) 3

Mandatory Learning Courses (MLC)

CV110	Environmental Studies	(1-0-0) 1
SM111	Professional Ethics and Human Values	(1-0-0) 1
EC100	Elements of Electronics an Communication Engineering	(2-0-0) 2

(For Computer Science, Mechanical, Civil, Mining, Metallurgy, Chemical Engineering branches only)

EE110	Elements of Electrical Engineering	(2-0-0) 2

(For Computer Science, Mechanical, Civil, Mining, Metallurgy, Chemical Engineering branches only)

ME110	Elements of Mechanical Engineering	(2-0-0) 2

(For Computer Science, IT, E &C, E & E, Civil, Mining, Metallurgy, Chemical Engineering branches only)

Right column:

PH110	Physics	(3-1-0) 4
PH111	Physics Laboratory	(0-0-2) 1
CY110	Chemistry	(3-0-0) 3
CY111	Chemistry Laboratory	(0-0-3) 2

Engineering Science Core (ESC)

WO110	Engineering Mechanics	(3-0-0) 3
ME111	Engineering Graphics	(1-0-3) 3

Humanities and Social Science Core (HSC)

SM110	Professional Communication	(3-0-0) 3

Mandatory Learning Courses (MLC)

CV110	Environmental Studies	(1-0-0) 1
SM111	Professional Ethics and Human Values	(1-0-0) 1
ME 100	**Introduction to Design Thinking**	**(2-0-0) 2**

Other courses under Engineering Science core (ESC)

Computer Programming courses under ESC

(Set 1 or Set 2 as specified by the Department offering the B.Tech Programme)

Set 1			
CS110	C Programming	(3-0-0) 3
CS111	C Programming Lab	(0-0-3) 2

OR

Set 2			
CS 100	Python Programming	(3-0-0) 3
CS101	Python Programming Lab	(0-0-3) 2

		EC 100 Elements of (2-1-0)2 Electronics and Communicatio n Engineering (For Computer Science, Mechanical, Civil, Mining, Metallurgy, Chemical Engineering branches only) EE110 Elements of (2-0-0)2 Electrical Engineering (For Computer Science, Mechanical, Civil, Mining, Metallurgy, Chemical Engineering branches only) ME110 Elements of (2-0-0)2 Mechanical Engineering (For Computer Science, IT, **AI**, E &C, E & E, Civil, Mining, Metallurgy, Chemical Engineering branches only) **Suggested plan of study for I**st **year** **(Annexure - I)**	
BOS.36.2.6 Minor Programme in B.Tech: **Modification in Clause 3.7.**	**Curriculum 2020 -B .Tech Regulations :Clause 3.7. Minor programme in B Tech** a) A student in a particular discipline can take additional specified courses totaling 15 to 20 credits in other disciplines. If he/she gets a GPA of 7.0 in these courses, then it will find a mention in their grade cards and degree certificate. b) A student can opt for Minors in Third Semester and register for Minor Courses (Mn) from Third to Eighth Semesters. Students who have cleared all the	**The BOS resolved to recommend the following modification in Curriculum 2020-B.Tech Regulations : Clause 3.7 from AY 2021-22.** **Minor programme in B Tech** **A) A student in a particular discipline can take additional specified courses totaling 15 to 20 credits for,** **a)** **Minor in other disciplines where all the courses are offered by a department other than his/her parent department** **or** **b)** **Interdisciplinary Minor where courses are offered by two or more**	For Senate approval

	courses of first and second semester in first attempt and have obtained a CGPA ≥ 7 and GPA (of common courses in the first year) ≥ 7.0 are eligible to register for minor courses. c) Allotment of minor will be based on merit list prepared on the basis of GPA of common courses in the first year. d) In case a student does not get a GPA of 7.0 in minor courses, then these courses can be counted towards their elective credit requirement.	**departments** **or** c) **Minor in Niche areas in their parent discipline** A) If he/she gets a GPA of 7.0 in these courses, then it will find a mention in their grade cards and degree certificate. B) A student can opt for Minors in Third Semester and register for Minor Courses (Mn) from Third to Eighth Semesters. Students who have cleared all the courses of first and second semester in first attempt and have obtained a CGPA ≥ 7 and GPA (of common courses in the first year) ≥ 7.0 are eligible to register for minor courses. C) Allotment of minor will be based on merit list prepared on the basis of GPA of common courses in the first year. D) In case a student does not get a GPA of 7.0 in minor courses, then these courses can be counted towards their elective credit requirement.	
BOS.36.2.7 Course Syllabus for ME 100 Introduction to Design Thinking Proposed by Department of Mechanical Engineering	-	**The BOS resolved to recommend** the course syllabus for **ME 100 Introduction to Design Thinking** proposed by the Department of Mechanical Engineering . **(Annexure IV Page 41-44)**	For Senate approval

BOS.36.2.8 Course Syllabus for CS 100 Python programming and CS 111 Python programming lab **Proposed by Department of Computer Science and Engineering**	-	**The BOS resolved to recommend** the course syllabus proposed by the Department of Computer Science and Engineering for the following courses CS 100 Python programming (3-0-0) 3 CS 101 Python programming lab (0-0-3) 2 **(Annexure VII Page 23 - 28)**	**For Senate approval**
BOS.36.2.9 Introduction of an Interdisciplinary Minor in " Machine learning"		**The BOS resolved to recommend the proposal** to introduce an **Interdisciplinary Minor in "Machine learning"** with five courses, out of which four compulsory courses being offered by the Departments of IT (one course), CSE (one course) and MACS (two courses) and a fifth course which is discipline specific to be offered by students' parent department. The proposal of the committee involving representatives from all the nine departments offering B.Tech programmes and the Department of MACS on the minor programme structure, the list of courses and the course syllabus is attached. **(Annexure - II Page 1-28)**	**For Senate approval**
ITEM No.: 36-BOS-3: Proposal of Department of Chemistry: Inclusion of a new self study course CY912: Materials Chemistry for Ph.D program.			**For Senate approval**

BOS resolved to recommend the proposal of Department of Chemistry for inclusion of a new self-study course "CY 912: Materials Chemistry" in the Ph.D curriculum.

Details are enclosed as Annexure – XII Page No. 1 - 3

ITEM No.: 36-BOS-4:   Proposals of Dept. of Civil Engineering

(a) Introduction of Elective courses for B.Tech programme

BOS resolved to recommend the inclusion of the following electives in the list for UG program.

i)   CV325 Structural Masonry and Alternative Building Technologies (3-0-0)3
ii)   CV376 Disaster Management with Spatial Method (3-0-0)3

Details are enclosed as Annexure – III Page No. 28-29

	For Senate approval

(b) Change of Course code of existing course in the B.Tech curriculum

The BOS resolved to recommend the proposal of Department of Civil Engineering to change of Course code of existing elective course from CV476 Disaster Management and Mitigation to CV326.

The details are enclosed as Annexure – III Page No. 29-30

For Senate approval

(c)   Inclusion of 900 level courses – Department of Civil Engineering

The BOS resolved to recommend the proposal of Department of Civil Engineering for the inclusion of 900 level courses listed in the Annexure in the Ph.D curriculum.

The details are enclosed as Annexure – III Page No.31-34

For Senate approval

ITEM No.: 36-BOS-5 Proposals of Department of Computer Science and Engineering	
(a) *Inclusion of new Elective Course for M.Tech*	
The BOS resolved to recommend the proposal of department of Computer Science and Engineering to introduce the following new Elective course for the M.Tech program in CSE and CSE-IS from 2021 – 22 onwards.	For Senate approval
CS741 - Next Generation Cloud Architecture (3-1-0) 4	
The details are enclosed as Annexure – VII Page No. 29 - 32	
(b) *Inclusion of 900 level Courses in the curriculum for Ph.D program*	
The BOS resolved to recommend the proposal of the Department of Computer Science and Engineering to include the following 900 level courses *in the curriculum for Ph.D program*	For Senate Approval
i) CS930 Quantum Computation (4-0-0) 4 ii) CS931 Reversible Computation (4-0-0) 4 iii) CS932 Advanced Cloud Architecture (4-0-0)4	
The details are enclosed as Annexure – VII Page No. 33 - 35	
(c) *To offer specialization under B.Tech CSE degree wherein students have to earn additional 20 credits*	
The Department of Computer Science and Engineering had proposed to offer specialization under B.Tech CSE degree wherein students have to earn additional 20 credits in one the following proposed stream in addition to the minimum credits to be earned for B.Tech Degree. Specialization in Artificial Intelligence and Machine Learning Basket 1 : CS312, CS320, CS422, CS423, CS490 Specialization in Distributed and Cloud Computing CS362, CS363, CS428, CS430, CS491	

Specialization in Cyber-Physical Systems CS412, CS415, CS460, CS461, CS492 Specialization in Networking CS359, CS433, CS435, CS469, CS493 Specialization in Security CS311, CS418, CS463, CS427, CS470 **The BOS resolved to recommend that the Department of Computer Science and Engineering may offer these specializations as Minor programme for B.Tech Computer Science and Engineering students under the category of "Minor in Niche areas", wherein students have to earn additional 20 credits in one of the above streams in addition to the minimum credits to be earned for B.Tech Degree.** **The details are enclosed as Annexure – VII Page No. 4 & 7**	For Senate Approval
(d) Introduction of Two MATHS courses as program core course for B.Tech degree programme **The BOS resolved to recommend** the proposal of Department of Computer Science and Engineering to introduce the following two MATHS courses as program core course for the B.Tech degree programme in Computer Science and Engineering. **MA 208 (3-0-0) 3 – Probability Theory and Applications** **MA 204 (3-0-0) 3 – Linear Algebra and Matrices** **The details are enclosed as Annexure – VII Page No. 4**	For Senate Approval
(e) To include Capstone and mini projects in the curriculum for B.Tech **The BOS resolved to recommend** the proposal of Department of Computer Science and Engineering to include the following Cornerstone/capstone and mini projects (Optional) in the curriculum for B.Tech 　　　Mini projects - CS 300, CS 350, CS 400, CS 450 - Maximum 4 credits 　　　Cornerstone/capstone Project – CS 401 - 4 credits **The details are enclosed as Annexure – VII Page No. 7**	For Senate Approval

(f) To provide option to do the major projects either during 7th and 8th semester **The BOS resolved to recommend** the proposal of Department of Computer Science and Engineering to provide an option to do the major project either in the institute or in the industry, either during VII or VIII semester. **The details are enclosed as Annexure – VII Page No. 4**	For Senate Approval

ITEM No.: 36-BOS-6   Proposals of Department of Electrical and Electronics Engineering

(a) Renaming of UG courses

The BOS resolved to recommend the proposal of the Department of Electrical and Electronics Engineering to rename the following courses without altering any other aspects of the course.

For Senate Approval

Course Code	L-T-P (Credits)	Existing/Present name of the course (As per Curriculum 2020)	New name resolved to be implemented
EE213	(3-1-3) 6	Electrical Machines - I	Induction Motor and Transforms
EE258	(3-1-3) 6	Electrical Machines - II	Synchronous Machines and DC Machines
EE265	(3-1-0) 4	Power System Engineering-I	Power Transmission and Distribution
EE350	(3-1-0) 4	Power System Engineering-II	Power System Analysis
EE430	(3-1-0) 4	Robot Dynamics and Control	Introduction to Robot Dynamics and Control
EE432	(3-1-2) 5	Machine Learning	Introduction to Machine Learning
EE476	(3-1-0) 4	Optimization Techniques	Introduction to Nonlinear and Linear Optimization

The details are enclosed as Annexure – VIII   Page No. 11

(b) Changes in the degree requirements in B.Tech Curriculum

The BOS resolved to recommend the proposal of the Department of Electrical and Electronics Engineering for the following changes in the Degree Requirements for the B.Tech program:

Category of Courses	Minimum Credits to be Earned	As per Curriculum 2020: Minimum Credits to be Earned
Foundation Courses (FC)		
Basic Science Core (BSC)	**16**	*16*
Engineering Science Core (ESC)	**13**	*13*
Humanities and Social Science Core (HSC	**9**	*9*
Programme Core (PC)	**64**	64
Electives (Elective courses*/ Mini Projects** /MOOC/GIAN/NPTEL Courses***)	**38**	37
Project (MP): Major Project	**6**	6
Mandatory Learning Courses (MLC)****	**16**	5
Total	**162**	150

The details are enclosed as Annexure – VIII   Page No. 10

For Senate Approval

(c) To change the credits for Practical Training

The BOS resolved to recommend the proposal of the Department of Electrical and Electronics Engineering to change the credits of **EE498** Practical Training from existing 2 credits to one credit as per suggested recent guidelines related to MLCs.

The details are enclosed as Annexure – VIII   Page No. 9

For Senate Approval

(d) Changes in listing of Programme Specific Elective (PSE) courses to segregate Design and Development Task under the sub heading "Mini Projects"

The BOS resolved to recommend the proposal of the Department of Electrical and Electronics Engineering to segregate and list the following of Programme Specific Elective (PSE) courses under the sub heading "Mini projects". EE 347 Design & Development task in Control Systems (0-0-3) 2 EE 348 Design and Development Task in Power Electronics & Drives (0-0-3) 2 EE 397 Design & Development task in Signal Processing (0-03) 2 EE 398 Design and Development task in Power Systems (0-0-3) 2 **The details are enclosed as Annexure – VIII Page No. 12** *(e) Changes in indicating the course requirements of the Honors Degree of EED* **The BOS resolved to recommend** the proposal of the Department of Electrical and Electronics Engineering to add a note indicating the course requirements of the Honors Degree of EED and to eliminate existing listing of PG courses from the UG curriculum. **The details are enclosed as Annexure – VIII Page No. 13**	For Senate Approval For Senate Approval
ITEM No.: 36-BOS-7 Proposal of Department of Electronics and Communication Engineering *(a) Inclusion of new Elective Courses for UG* **The BOS resolved to recommend** the proposal of the Department of Electronics and Communication Engineering to introduce the following new Elective courses for B.Tech (ECE) : i) EC 360 Machine Learning for Wireless Communication Systems (3-1-0) 4 ii) EC 361 Sparse representations and compressive sensing (3-1-0) 4 iii) EC 362 Deep Reinforcement Learning (3-1-0) 4 iv) EC 363 Machine Learning Applications in Radar Signal Processing (3-1-0) 4 **The details are enclosed as Annexure – VI Page No. 9 - 12**	For Senate Approval

(b) To permit M.Tech students to earn elective credits from the MOOC (NPTEL – SWAYAM) courses

(c) **The BOS resolved to consider** the proposal of the Department of Electronics and Communication Engineering to permit M.Tech students to earn elective credits from the MOOC (NPTEL – SWAYAM) courses and recommended that students of all the PG programmes may be permitted to earn maximum 3 credits from the MOOC (NPTEL – SWAYAM) courses towards the elective credit requirements. Further, it is recommended that the credits earned through MOOC courses should not be included for CGPA calculations.

The details are enclosed as Annexure – VI Page No. 13

For Senate Approval

(c) Inclusion of new Elective Courses for M.Tech program

The BOS resolved to recommend the proposal of the Department of Electronics and Communication Engineering for the inclusion of the following new Elective Courses for the M.Tech programs :

CEN Streams
i) EC 851 Smart Antennas for Mobile Communication (3-1-0) 4
ii) EC 852 Synchronization in Wireless Communication Systems (3-1-0) 4
ii) EC 853 Channel Modelling and Equalizer Design for Wireless Communication (3-1-0) 4

SPML Streams
i) EC 878 Computer Algorithms and Data Structures (3-0-2) 4
ii) EC 879 Compressed Sensing and Sparse Signal Process (3-1-0) 4
iii) EC 880 Deep Learning in Radar Signal Processing (3-1-0) 4

The details are enclosed as Annexure – VI Page No. 13 - 16

For Senate Approval

(c) Inclusion of Self Study courses for Ph.D program

The BOS resolved to recommend the proposal of the Department of Electronics and Communication Engineering to include the following 900 level courses for Ph.D program

i) EC 912 Advanced Coding Techniques for Wireless and Storage Systems 4
ii) EC 913 Machine Learning for Signal Processing 4
iii) EC 914 Algorithms for Satellite Image Processing 4

The details are enclosed as Annexure – VI Page No. 16 - 18

For Senate Approval

ITEM No.: 36-BOS-8   The proposal of the Department of Information Technology

a) *Change in Course codes of B.Tech (AI) program*

The BOS resolved to recommend the changes in the course codes of B.Tech in Artificial Intelligence programme proposed by **Department of Information Technology** in order to follow the Institute guidelines on course codes .

The details are enclosed as Annexure – V Page No.   1

| | For Senate Approval |

b) *Introduction of new 900 level courses*

The BOS resolved to recommend the proposal of Department of Information Technology to introduce the following new 900 level courses

1. IT933 Visual Computing   -   4 credits
2. IT935 Quantum Computing -   4 credits
3. IT936 Blockchain Technology -   4 credits
4. IT934 Computational Finance-   4 credits

The details are enclosed as Annexure – V Page No. 39 - 44

For Senate Approval

ITEM No.: 36-BOS-9: Proposals of Department of Mechanical Engineering

a) *Introduction of new UG program Elective courses -*

The BOS resolved to recommend the proposal of department of Mechanical Engineering to introduce the following new elective courses:

1. ME 432 : Analytical Mechanics (3-0-0) 3
2. ME 433 : Condition Monitoring (3-0-0) 3
3. ME 434 : Micro fluidics (3-0-0) 3
4. ME 435 : Solar Energy (3-0-0) 3
5. ME 436 : Engineering Tribology (3-0-0) 3
6. ME xxx : Thermal Stress Analysis (3-0-0) 3

The details are enclosed as Annexure – IV Page No. 2 - 8

For Senate Approval

b) Removal of PSEG restriction for M.Tech Elective courses	For Senate Approval
The BOS resolved to recommend the proposal of department of Mechanical Engineering to remove the PSEG1 and PSEG2 restriction for M.Tech elective courses.	
The details are enclosed as Annexure – IV Page No. 9 - 10	
c) The change in the title of the course ME 419	For Senate Approval
The BOS resolved to recommend the proposal of department of Mechanical Engineering to change the title of the course **ME 419: Processing of Composites** as **ME 419 Composite Materials** as the syllabus contains Mechanics of the Composites as well.	
The details are enclosed as Annexure – IV Page No. 1 & 15	
d) Changes in the course contents in ME 252 and ME 303	For Senate Approval
The BOS resolved to recommend the proposal of department of Mechanical Engineering to change the course content of the following courses	
ME 252 : Analysis and Design of Machine Components (3-1-0) 4 ME 303 : Design of Mechanical Drives (3-0-0) 3	
The details are enclosed as Annexure – IV Page No. 16	
e)Changes in the course content of ME 205: Workshop Practice (0-0-3)2	For Senate Approval
The BOS resolved to recommend the proposal of department of Mechanical Engineering to change the course content of	
ME 205: Workshop Practice (0-0-3) 2	
The details are enclosed as Annexure – IV Page No.17	

f) Reshuffling of courses and changes in the course codes in the current course structure of B.Tech

The BOS resolved to recommend the proposal of department of Mechanical Engineering for reshuffling of the courses and changes in the course codes in the current course structure of B.Tech as below:

Existing code	Code to be change to
ME 305 Control Engineering (3-0-0) 3	ME 353 Control Engineering (3-0-0) 3 Core
ME 353 Automation Systems (3-0-0) 3 Core	ME 415 Automation Systems (3-0-0) 3 Elective
ME 313 Mechatronic Systems (3-0-0) 3 Elective	ME 305 Mechatronic Systems (3-0-0) 3 Core
ME 415 Hydraulics and Pneumatic Control (3-0-0) 3 core	ME 313 Hydraulics and Pneumatic Control (3-0-0) 3 Elective

The details are enclosed as Annexure – IV Page No. 18

For Senate Approval

ITEM No.: 36-BOS-10 Proposals of Department of Metallurgical and Materials Engineering

(a) Renaming of M.Tech Course

The BOS resolved to recommend the proposal of Department of Metallurgical and Materials Engineering to rename the following course:

MT 723 "Synthesis Techniques for Nanomaterials as **"Synthesis of Nanomaterials and Nanostructures**

The details are enclosed as Annexure – X Page No. 1 - 3

For Senate Approval

(b) Renaming of PG program M.Tech (Process Metallurgy)

The BOS resolved to recommend the proposal of Department of Metallurgical and Materials Engineering to rename the PG program M.Tech (Process Metallurgy) as "Materials Process Technology"

The details are enclosed as Annexure – X Page No. 1 - 3

For Senate Approval

ITEM No.: 36-BOS-11 – Proposals of School of Management *(a) Introduction of Minor program in Economics under Minor in Niche areas* **(b) The BOS resolved to recommend** the proposal of School of Management to introduce the Minor program in Economics for students of various B.Tech Programmes with the following courses. Further, BOS resolved to recommend that as this programme is offered to B.Tech students, it may be considered under *the "Minor in other disciplines"*. i) SM 458 Introduction to Industrial Economics and Organization (3-0-0) 3 ii) SM 460 Microeconomics (3-0-0) 3 iii) SM 461 Macroeconomics (3-0-0) 3 iv) SM 462 Financial Economics (3-0-0) 3 v) SM463 Development Economics (3-0-0) 3 **The details are enclosed as Annexure – XIII Page No. 2 - 6**	**For Senate Approval**
(b) To change the course code of Minor in Management Courses to make it different from the MBA courses **The BOS resolved to recommend** the proposal of Department School of Management to change the course code of Minor in Management Courses to make it different from the MBA courses. **The BOS further recommended that** all the minor programme courses may have a department specific course code with suffix M,as resolved in the 50th Senate meeting. **The details are enclosed as Annexure – XIII Page No. 2-6**	**For Senate Approval**
(c) To remove the syllabus of SM869 Merger and Acquisitions from the MBA curriculum **The BOS resolved to recommend** the proposal of School of Management to remove the syllabus of SM869 Merger and Acquisitions from the MBA curriculum. **The details are enclosed as Annexure – XIII Page No. 2-6**	**For Senate Approval**

(d) *To change the restriction for elective courses from different baskets for MBA program* **The BOS resolved to recommend** the proposal of School of Management to have 4 elective courses from one basket, 2 from another basket and one each from the remaining baskets of the MBA electives for the 3rd and 4th semester as against existing 3 electives from one basket and remaining courses from other baskets subject to maximum 2 courses per basket. **The details are enclosed as Annexure – XIII Page No. 7**	For Senate Approval
ITEM No.:36-BOS-12: Proposals of SAS officers recommended by Dean (SW). **(a)** *Renaming of the existing "Dept. of Physical Education & Sports" as "Department of Physical Education and Sports Activities –* **The BOS resolved to consider** the proposal of SAS Officers recommended by of Dean (SW) to rename the **"Dept. of Physical Education & Sports" and recommended to rename it as "Department of Physical Education, Sports and Student Activities" so as** to cater to fulfill the academic requirements as per the revisions proposed for NEP 2020 implementation, by offering the MLC course on Liberal Arts courses/cocurricular, extracurricular activities. **The details are enclosed as Annexure – XIV Page No. 1 - 3**	For Senate Approval
(b) *Inclusion of new MLC courses under NEP 2020* **The BOS resolved not to recommend the** proposal of SAS Officers for the inclusion of new MLC courses listed in the Annexure under the new curriculum 2021-22. However, it is resolved that these components may be considered under Category A of the MLC course on Liberal Arts courses/co-curricular, extracurricular activities and the credits assigned may be considered while awarding the credits to students for these activities under category A. **The details are enclosed as Annexure – XIV Page No. 1-3**	For Senate Approval

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

ITEM No.: 36-BOS-13 Modification in Curriculum for B.Tech Degree for all the Programmes : Modification in list of course, suggested plan of study and Degree requirements to accommodate the proposed revisions as per NEP-2020 guidelines	
a) *Chemical Engineering (CH)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for B.Tech program in Chemical Engineering. The details are enclosed as ***Annexure XI Page No.. 1-6***	For Senate Approval
b) *Civil Engineering (CV)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for B.Tech program in Civil Engineering. The details are enclosed as ***Annexure III Page No. 10 - 27***	For Senate Approval
c) *Computer Science and Engineering (CO)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for B.Tech program in Computer Science and Engineering. The details are enclosed as ***Annexure – VII P. No. 6 - 22.***	For Senate Approval
d) *Electrical and Electronics Engineering (EE)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for B.Tech program in Electrical and Electronics Engineering. The details are enclosed as ***Annexure – VIII, P. No. 1 – 8***	For Senate Approval
e) *Electronics and Communication Engineering (EC)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for B.Tech program in Electronics and Communication Engineering. The details are enclosed as ***Annexure–VI, P.No.1-8***	For Senate Approval
f) *Information Technology (IT)*	
The BOS resolved to recommend the modification in the revised curriculum structure and contents for (i) B.Tech program in Information Technology and (ii) B.Tech program in Artificial Intelligence. The details are enclosed as ***Annexure – V , P. No. 2 – 38***	For Senate Approval

Further , it is resolved to recommend that the students of B.Tech (IT) should not be allowed to take Minor in AI and vice versa. The students of B.Tech (AI) should not be allowed to take the interdisciplinary Minor in Machine Learning.

g) Mechanical Engineering (ME) **The BOS resolved to recommend** the modification in the revised curriculum structure & contents for B.Tech. program in Mechanical Engineering. The details are enclosed as ***Annexure – IV, P. No. 10 – 14 & 20-35***	**For Senate Approval**
h) Metallurgical and Materials Engineering (MT) **The BOS resolved to recommend the modification in the revised** curriculum structure and contents for B.Tech program in Metallurgical and Materials Engineering. The details are enclosed as ***Annexure – X, P. No. 4 – 6***	**For Senate Approval**
i) Mining Engineering (MN) **The BOS resolved to recommend the modification in the revised** curriculum structure and contents for B.Tech program in Mining Engineering. The details are enclosed as ***Annexure – IX , P. No. 1-19***	**For Senate Approval**

ITEM No: 36-BOS-14: Inclusion of External Additional Guides **A) *Department of Chemistry*** 1. The DRPC of the *Department of* Chemistry has proposed that Prof. Abdul Wahab Mohammad Deputy Vice Chancellor, Universiti Kebangsaan Malaysia be considered for inclusion as an Additional Research Guide for Ms. Pallavi **The BOS resolved to consider Prof. Abdul Wahab Mohammad Deputy Vice Chancellor, Universiti Kebangsaan Malaysia as an Additional Research Guide for Ms. Pallavi in the Department of Chemistry.** **The details are enclosed as Annexure – XV Page No. 1 - 64** 2. The DRPC of the Chemistry Department has proposed that	**Reporting to Senate**

Dr. Ramin Rahnemay Farnood, Faculty of Applied Science and Engineering, University of Toronto, Canada be considered for inclusion as an Additional Research Guide for Mr. P. Satishkumar. **The BOS resolved to consider Dr. Ramin Rahnemay Farnood, Faculty of Applied Science and Engineering, University of Toronto, Canada as an Additional Research Guide for Mr. P. Satishkumar of Department of Chemistry.** **The details are enclosed as Annexure – XV Page No. 65 - 116**	Reporting to Senate
B) Department of Mechanical Engineering 1. The DRPC of Mechanical Engineering Department has proposed that Dr. Ramana Murthy, Scientist, Aeronautical Development Agency be considered as an External additional Guide for part time Ph.D students, Mr. Sankaraiah Mada (details in **Annexure XV Page No. 117 – 123**) and Mr. B. Gopi Krishna (details in **Annexure XV Page No. 132 – 138**) **The BOS resolved to consider Dr. Ramana Murthy, Scientist, Aeronautical Development Agency as an External additional Guide for the Ph.D students (under External Registrant category), Mr. Sankaraiah Mada and Mr. B. Gopi Krishna of the Department of Mechanical Engineering.**	Reporting to Senate
2. The DRPC of Mechanical Engineering Department has proposed to consider Dr. Vijeesh V. Associate Professor, NMAMIT, Nitte as an External Additional Guide for Rajath N. Rao. **The BOS resolved not to consider Dr. Vijeesh V. Associate Professor, NMAMIT, Nitte as an External Additional Guide for Rajath N. Rao of the Department of Mechanical Engineering.** **The details are enclosed as Annexure – XV Page No. 124 – 131** 3. The DRPC of Mechanical Engineering Department has proposed to consider Dr. Pulla Kondaiah, Assistant Professor, Mahindra University Hyderabad as an External Additional Guide for Silambarasan M.	Reporting to Senate

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

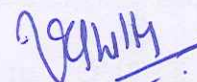|	
The BOS resolved not to consider Dr. Pulla Kondaiah, Assistant Professor, Mahindra University Hyderabad as an External Additional Guide for Silambarasan M. of the Department of Mechanical Engineering. **The details are enclosed as Annexure – XV Page No.139-144** 4. The DRPC of Mechanical Engineering Department has proposed to consider Dr. L Ravikumar, Professor, BMS College of Engineering, Bengaluru as an External Additional Guide for Tripti Pachori.	Reporting to Senate
The BOS resolved not to consider Dr. L Ravikumar, Professor, BMS College of Engineering, Bengaluru as an External Additional Guide for Tripti Pachori of the Department of Mechanical Engineering. **The details are enclosed as Annexure – XV Page No. 145-156**	Reporting to Senate

The Chairman (BOS) proposed the vote of thanks to the members.

Sandhya

Secretary – BOS, NITK   Chairman-BOS, NITK