

**VIGNAN'S**

Foundation for Science, Technology &amp; Research

(Deemed to be University)

-Estd. u/A 3 of UGC Act 1956

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****CIRCULAR**

Date: 24.03.2023

Department of CSE is planning to conduct Board of Studies (BoS) meeting for the B.Tech. CSE programme on **01.04.2023** from 10.00 AM in the blended mode (Physical meeting: CSE Conference Hall, Third floor, JC Bose Block, VFSTR and virtual meeting link: <https://us06web.zoom.us/j/86715862334?pwd=ZThNWUowc05yMHg3eVF6dDVNVndWZz09>). All the following members are requested to make it convenient to join the meeting.

**Members to attend the meeting:**

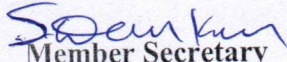
S. No	Name of the Member	Designation	Role
1	Dr. K.V. Krishna Kishore	Dean SoC&I, Professor & HoD	Chairperson
2	Mr. S. Deva Kumar	Assistant Professor	Secretary (Ex-officio)
<b>Internal Experts</b>			
1	Dr. S. V. Phani Kumar	Sr. Associate Professor	Member
2	Dr. M. Umadevi	Associate Professor	Member
3	Mr. D. Yakobu	Assistant Professor	Member
4	Mr. S.Satish Kumar	Assistant Professor	Member
5	Dr. B. Rajesh	Assistant Professor	Invited Member (Nominee – Dean R&D)
<b>External Experts</b>			
1	Prof. R.B.V.Subramanyam Professor, Dept. of CSE, NIT Warangal. rbvs66@gmail.com, rbvs66@nitw.ac.in, +91 949 134 6969	Professor	Member
2	Dr.B.Venkata Ramana Associate Professor, HoD-CSE, IIT, Tirupathi. ramana@iittp.ac.in +91 963 621 3350	Associate Professor	Member
3	Prof. C.R.Rao Professor, SCIS, University of Hyderabad. crres@uohyd.ernet.in +91 924 746 5125	Professor	Invited Member
4	Dr. Nagesh Bhattu Sristy Asst. Professor Department of CSE, NIT AP.	Assistant Professor	Invited Member



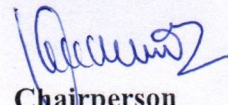
nageshbhattu@nitandhra.ac.in +91 94419 55120		
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**Agenda of the BoS Meeting:**

1. Review on Results Analysis for the academic year 2022-23 I Sem.
2. Review of question paper standards as per Bloom's Taxonomy for the academic year 2022-23 I Sem.
3. Identification of NPTEL courses for R22 students.
4. Approval of attainment of PO's, PSO's and SOs for the 2018 and 2019 batch students.
5. Any other point with the permission of chair.

  
**Member Secretary**

Mr. S. Deva Kumar  
Asst. Professor, Department of CSE,  
VFSTR Deemed to be University,  
Vadlamudi.

  
**Chairperson**

Dr. K.V. Krishna Kishore  
Dean, School of Computing and Informatics,  
Professor & Head, Dept. of CSE,  
VFSTR Deemed to be University, Vadlamudi.





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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 03.04.2023

### **Minutes of Board of Studies Meeting**

Board of Studies (BoS) meeting for the B.Tech - CSE programme was conducted in the blended mode from 10.00 AM to 12.00 Noon on 01.04.2023. (Physical meeting : CSE Conference Hall, Third floor, JC Bose Block, VFSTR and virtual meeting link : <https://us06web.zoom.us/j/86715862334?pwd=ZThNWUowc05yMHg3eVF6dDVNVndWZz09>)

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4. Approval of attainment of PO's, PSO's and SOs for the 2018 and 2019 batch students.
5. Any other point with the permission of chair.

The following members were present either thorough offline or online.

S. No	Name of the Member	Designation	Role
1	Dr. K.V. Krishna Kishore	Dean SoC&I, Professor & HoD	Chair Person
2	Prof. R.B.V.Subramanyam Professor, Dept. of CSE, NIT Warangal. rbvs66@gmail.com, rbvs66@nitw.ac.in +91 949 134 6969	Professor	Member
3	Dr.B.Venkata Ramana Associate Professor, HoD-CSE, IIT, Tirupathi. ramana@iittp.ac.in +91 963 621 3350	Associate Professor	Member
4	Prof. C.R.Rao Professor, SCIS, University of Hyderabad. crrcs@uohyd.ernet.in +91 924 746 5125	Professor	Invited Member
5	Dr. Nagesh Bhattu Sristy Asst. Professor Department of CSE, NIT AP. nageshbhattu@nitandhra.ac.in	Assistant Professor	Invited Member



	+91 94419 55120		
6	Dr. S. V. Phani Kumar	Sr. Associate Professor	Member
7	Dr. M. Umadevi	Associate Professor	Member
8	Mr. D. Yakobu	Assistant Professor	Member
9	Mr. S.Satish Kumar	Assistant Professor	Member
10	Dr. B. Rajesh	Assistant Professor	Invited Member (Nominee – Dean R&D)
11	Mr. S. Deva Kumar	Assistant Professor	Secretary (Ex-officio)

Dr. K.V. Krishna Kishore, Dean SoC&I, Professor and Head CSE, Chairperson initiated the meeting with his opening remarks and heartily welcomed all the internal and external members of the BoS.

**The following resolutions made after the discussion:**

1. BoS Chairman, Dr. K V Krishna Kishore appreciated the support and welcomed their suggestions given during the framing of course structure of B.Tech. CSE programme on 27.06.2022.

Chairperson also shared the feedback and views received from Curriculum Design and Monitoring Committee, Program Monitoring and Assessment Committee.

Further the discussions are initiated with the proposed changes for R 22 Course Structure and Contents of B.Tech. CSE Programme.

2. Based on the views of Digital Logic Design faculty and Students views, the committee initiated the discussion of revising the L-T-P structure of the course Digital Logic Design (DLD). After thorough discussion, practice component is added to the DLD. Revised Course Structure is presented in Annexure I.
3. The chairperson of the meeting presented the formative and summative results of the previous semester. The correlation between formative and summative results was also presented. After the thorough discussions, the members focused on the actions to be taken for the reducing number of R-grade and I-grade students. The members have proposed various strategies such as extensive usage of effective teaching and learning methods, proper mentoring, frequent attendance monitoring, and strengthening the assessment and evaluation methods.



4. Dr.B.Venkata Ramana has commented that the quality of the summative question papers is very good but he suggested to include few questions in the Bloom's taxonomy of Level 1 and Level 2 to make the student to attempt for at least 30- 40% of the marks.

Dr. Nagesh Bhattu Sristy is also advised to follow the similar strategy for formative assessment also.

5. Mr. S Deva Kumar, Member secretary presented the list of SWAYAM-NPTEL courses for II B. Tech CSE students. These courses could be chosen as additional courses under Open elective/ Department elective/ Honors/ Add-on certification. It was noted that this is a regular practice to encourage students towards self-learning and life-long learning. After discussing the matter, the members approved the list of SWAYAM-NPTEL courses and appreciated the efforts of Students and Faculty Community. The list is attached in the Annexure-II.

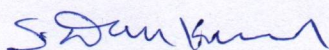
6. Further Chairperson has presented the CO, PO and SO attainment of 2018 and 2019 batch for ratification. Prof. R.B.V.Subramanyam has enquired about the procedures adopted for the computation. Chairperson elaborated the procedures and presented the Web Application for the computation of above. Members have suggested the department to undertake proper actions for non-attained COs and POs.

7. Finally, Chairperson appreciated the suggestions of both Internal and External members and he also mentioned that the revised curriculum and syllabi will be sent for the Academic Council for approval.

The BoS members were thanked for their contributions to the meeting, and the meeting was adjourned.

**Summary of the Board of Studies meeting:**

1. Discussion on formative and summative results of previous semester
2. Preparation of summative assessment question papers
3. Syllabus and L-T-P changes in courses of R22 regulations
4. Discussion on SWAYAM-NPTEL courses
5. Suggestions on offering open elective, department elective, and honor courses
6. Challenges faced in the R22 curriculum while handling the courses
7. Approval of attainment of PO's, PSO's and SOs for the 2018 and 2019 batch students.



**Member Secretary**

Mr. S. Deva Kumar

Asst. Professor, Department of CSE,

VFSTR Deemed to be University.



**Chairperson**

Dr. K.V.Krishna Kishore

Dean, SoCI, Professor & Head, CSE,

VFSTR Deemed to be University.



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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****Annexure I****B.Tech., CSE Programme: Curriculum Structure****I Year I Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	22MT103	Linear Algebra and Ordinary Differential Equations	3	2	0	4
2	22PY105	Semiconductor Physics and Electromagnetics	3	0	2	4
3	22EE101	Basics of Electrical and Electronics Engineering	2	0	2	3
4	22CT103	Engineering Chemistry	3	0	2	4
5	22TP103	Problem Solving through Programming I	2	2	2	4
6	22EN102	English Proficiency and Communication Skills	0	0	2	1
7	22TP101	Constitution of India	0	2	0	1
8	22SA101	Physical Fitness, Sports and Games – I	0	0	3	1
		<b>Sub-Total</b>	<b>13</b>	<b>6</b>	<b>13</b>	<b>22</b>
		<b>Total</b>	<b>32</b>			<b>22</b>

**I Year II Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	22MT106	Algebra	3	2	0	4
2	22MT107	Discrete Mathematical Structures	3	2	0	4
3	22ME101	Engineering Graphics	2	0	2	3
4	22TP104	Problem Solving through Programming II	1	2	2	3
5	22EN104	Technical English Communication	2	0	2	3
6	22MT108	Numerical Methods	3	2	0	4
7	22SA102	Orientation Session	0	0	6	3
8	22SA103	Physical Fitness, Sports and Games – II	0	0	3	1
		<b>Sub-Total</b>	<b>14</b>	<b>8</b>	<b>15</b>	<b>25</b>
		<b>Total</b>	<b>34</b>			<b>25</b>



## II Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22ST202	Probability and Statistics	3	0	2	4
2	22TP201	Data Structures	2	2	2	4
3	22MS201	Management Science	2	2	0	3
4	22CS201	Database Management Systems	2	2	2	4
5	22CS202	Digital Logic Design	2	0	2	3
6	22CS203	Object-Oriented Programming through JAVA	2	0	2	3
7	22CT201	Environmental Studies	2	1	0	2
8	22SA201	Life Skills - I	0	0	2	1
9		NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication	0	0	0	1
		<b>Sub-Total</b>	<b>15</b>	<b>7</b>	<b>12</b>	<b>25</b>
		<b>Total</b>	<b>34</b>			<b>25</b>

## II Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22TP203	Advanced Coding Competency	0	0	2	1
2	22TP204	Professional Communication	0	0	2	1
3	22CS205	Computer Organization and Architecture	2	2	0	3
4	22CS206	Design and Analysis of Algorithms	2	2	2	4
5	22CS207	Operating Systems	2	0	2	3
6	22CS208	Theory of Computation	3	2	0	4
7	22SA202	Life Skills - II	0	0	2	1
8		Open Elective – 1	3	0	0	3
		<b>Sub-Total</b>	<b>12</b>	<b>6</b>	<b>10</b>	<b>20</b>
9		Minor / Honours – 1	3	0	2	4
		<b>Sub-Total</b>	<b>15</b>	<b>6</b>	<b>12</b>	<b>24</b>
		<b>Total</b>	<b>33</b>			<b>24</b>



### III Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22TP301	Soft Skills Laboratory	0	0	2	1
2	22CS301	Introduction to Artificial Intelligence	2	2	0	3
3	22CS302	Compiler Design	2	2	0	3
4	22CS303	Web Technologies	2	0	2	3
5	22CS304	Inter-Disciplinary Project – Phase I	0	0	2	0
6	22CS305	Industry Interface Course	1	0	0	1
7		Department Elective – 1	3	0	2	4
8		Open Elective – 2	3	0	0	3
9		NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication	0	0	0	1
		<b>Total</b>	<b>13</b>	<b>4</b>	<b>8</b>	<b>19</b>
10		Minor / Honours – 2	3	0	2	4
		<b>Total</b>	<b>16</b>	<b>4</b>	<b>10</b>	<b>23</b>
		<b>Total</b>	<b>30</b>			<b>23</b>

### III Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22TP302	Quantitative Aptitude and Logical Reasoning	1	2	0	2
2	22CS204	Computer Networks	3	0	2	4
3	22CS306	Data Mining Techniques	2	0	2	3
4	22CS307	Software Engineering	2	0	2	3
5	22CS308	Inter-Disciplinary Project – Phase II	0	0	2	2
6		Department Elective – 2	3	0	2	4
7		Open Elective – 3	3	0	0	3
		<b>Sub-Total</b>	<b>14</b>	<b>2</b>	<b>10</b>	<b>21</b>
8		Minor / Honours – 3	3	0	2	4
		<b>Sub-Total</b>	<b>17</b>	<b>2</b>	<b>12</b>	<b>25</b>
		<b>Total</b>	<b>31</b>			<b>25</b>



**IV Year I Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS401	Cryptography and Network Security	2	0	2	3
2	22CS402	Big Data Analytics	2	0	2	3
3	22CS403	Cloud Computing	2	0	2	3
4		Department Elective – 3	3	0	2	4
5		Department Elective – 4	3	0	2	4
		<b>Sub-Total</b>	<b>12</b>	<b>0</b>	<b>10</b>	<b>17</b>
6		Minor / Honours – 4	3	0	2	4
		<b>Sub-Total</b>	<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>
		<b>Total</b>	<b>27</b>			<b>21</b>

**IV Year II Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS404	Project Work	0	2	22	12
		<b>Total</b>	<b>0</b>	<b>2</b>	<b>22</b>	<b>12</b>
2		Minor / Honours – 5	0	2	6	4
		<b>Total</b>	<b>0</b>	<b>4</b>	<b>28</b>	<b>16</b>
		<b>Total</b>	<b>32</b>			<b>16</b>



### Department Electives

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS801	Advanced Data Structures	2	2	2	4
2	22CS802	Advanced JAVA Programming	2	2	2	4
3	22CS803	Computer Graphics	2	2	2	4
4	22CS804	Deep Learning	3	0	2	4
5	22CS805	Digital Forensics	3	0	2	4
6	22CS806	Digital Image Processing	2	2	2	4
7	22CS807	Web and Database Security	3	0	2	4
8	22CS808	Machine Learning	3	0	2	4
9	22CS809	Mobile Ad-hoc Networks	3	0	2	4
10	22CS810	Mobile Application Development	2	0	4	4
11	22CS811	Text Mining	3	0	2	4
12	22CS812	Numerical Algorithms	3	2	0	4
13	22CS813	Operating System Design	3	0	2	4
14	22CS814	Optimization Techniques	3	2	0	4
15	22CS815	Intrusion Detection and Prevention System	3	0	2	4
16	22CS816	Simulation and Modeling	3	0	2	4
17	22CS817	Parallel and Distributed Computing	3	2	0	4

### Honours for CSE

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS951	Advanced Graph Algorithms	3	0	2	4
2	22CS952	Biometrics	3	0	2	4
3	22CS953	Parallel and Distributed Computing	3	2	0	4
4	22CS954	Internet of Things	3	0	2	4
5	22CS955	Wireless Sensor Networks	3	0	2	4
6	22CS956	Capstone Project	0	2	6	4

### Open Electives offered to non-computers

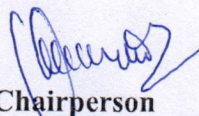
Sl.No	Course Code	Course Title	L	T	P	C
1	22CS851	Database Systems	2	0	2	3
2	22CS852	Mobile Application Design and Development	2	0	2	3
3	22CS853	Java Programming	2	0	2	3
4	22CS854	Python Programming	2	0	2	3
5	22CS855	Design and Development of Internet Applications	2	0	2	3



**CSE – Minor Courses**

**Computer Science and Engineering**

Sl.No	Course Code	Course Title	L	T	P	C
1	22CS901	Introduction to Python Programming	2	2	2	4
2	22CS902	OOPS through JAVA	2	0	4	4
3	22CS903	Database Management Systems	2	2	2	4
4	22CS904	Web Technologies	2	0	4	4
5	22CS905	Mobile Application Development	2	0	4	4
6	22CS906	Design and Analysis of Algorithms	2	2	2	4
7	22CS907	Operating Systems and Shell Programming	2	2	2	4
8	22CS908	Computer Networks	3	0	2	4
9	22CS909	Capstone Project	0	2	6	4



**Chairperson**

Dr. K.V.Krishna Kishore  
Dean, School of Computing and Informatics,  
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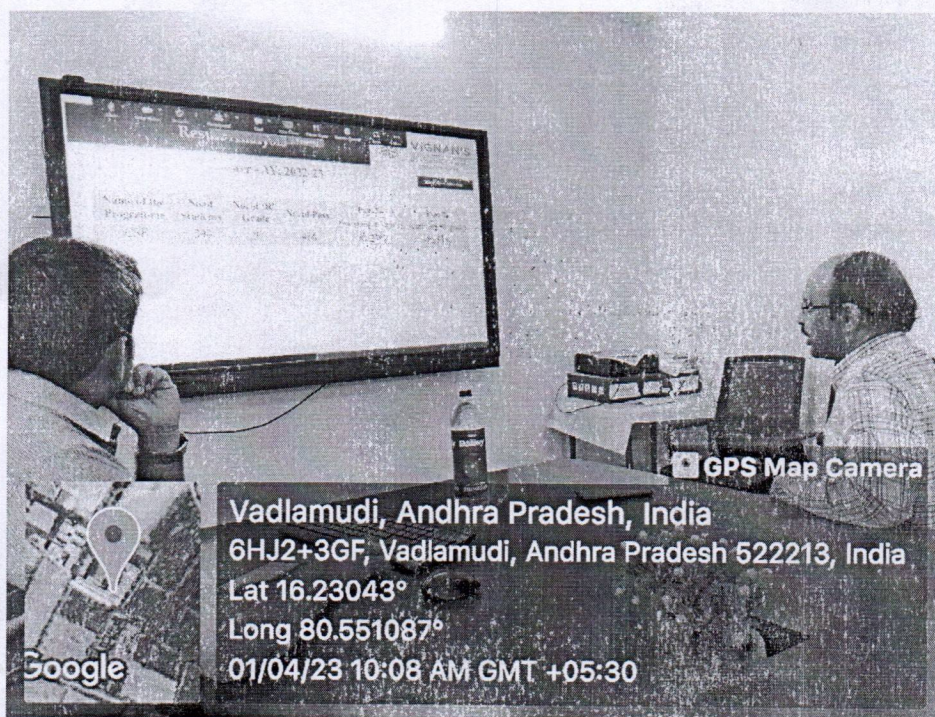
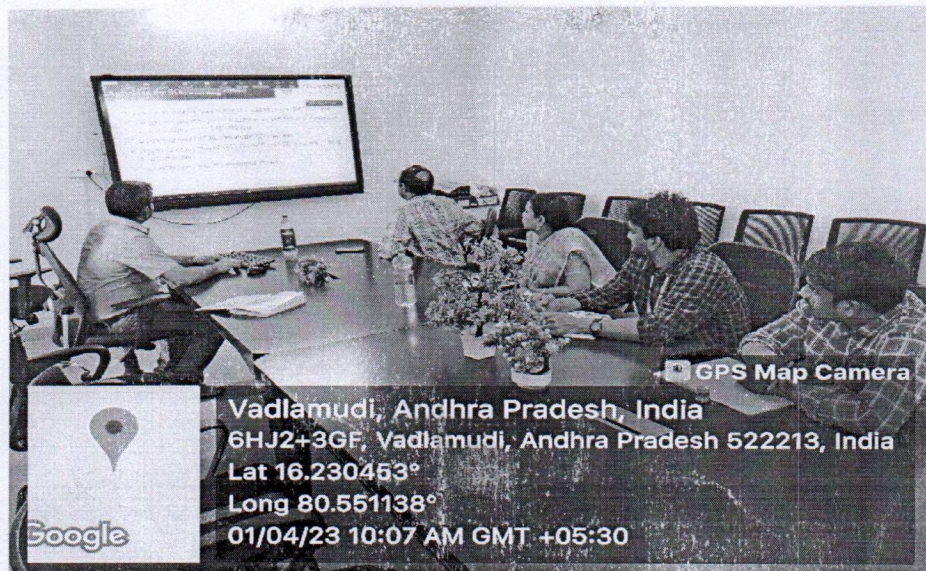
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****Annexure II**

S.No.	COURSE TITLE	RESOURCE PERSON	Institute	Duration in Weeks	PRE-REQUISITES
1	Randomized Methods in Complexity	Prof. Nitin Saxena	IITK	12	Theory of Computation, or Algorithms, or Discrete Mathematics
2	Quantum Algorithms and Cryptography	Prof. Shweta Agrawal	IITM	12	Theory of Computation, Design and Analysis of Algorithms, Foundations of Cryptography
3	Privacy and Security in Online Social Media	Prof. Ponnurangam Kumaraguru	IIITH	12	Basic / Intermediate programming course.
4	GPU Architectures And Programming	Prof. Soumyajit Dey	IITKGP	12	Programming and Data Structure, Digital Logic, Computer architecture
5	Foundations of Cyber Physical Systems	Prof. Soumyajit Dey	IITKGP	12	Basic Programming Knowledge, Discrete Mathematics
6	Discrete Structures	Prof. Dipanwita Roy Chowdhury	IITKGP	12	Mathematics and basics Computer Programming
7	Reinforcement Learning	Prof. Balaraman Ravindran	IITM	12	Basic mathematical foundations
8	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	IITM	8	C programming must be strong. Minimum understanding of digital logic/ operating systems/computer organization
9	Data Science for Engineers	Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	IITM	8	10 hrs of pre-course material will be provided, learners need to practice this to be ready to take the course
10	Introduction to parallel programming with OpenMP and MPI	Prof. Yogish Sabharwal	IITD	8	Comfortable with programming in C
11	Foundation of Cloud IoT Edge ML	Prof. Rajiv Misra	IITP	8	Basics of Computer Architecture and Organization, Networking





**Member Secretary**

Mr. S. Deva Kumar

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