KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15
(An Autonomous Institute under Kakatiya University, Warangal)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Networks)

MINUTES OF THE MEETING OF BOARD OF STUDIES (BoS) in
COMPUTER SCIENCE & ENGINEERING (Networks)
Held at 10.00 AM on 03.08.2024 (Saturday) In Hybrid Mode
Venue: Industrial IoT Laboratory

Agenda:
1. Approval of the scheme of instruction of B.Tech. CSE (Networks) program underURR24
2. Approval of the syllabus of B.Tech. CSE (Networks) program – I & II semesters underURR24
3. Approval of rules and regulations under URR24
4. All Other Item with the Permissions of chair.

Members Present:

S.No.	Name	Designation	Present/Absent
1.	**Dr.V.Shankar**	*Professor, Dept of CSE(N)Warangal*	*(signature)*
2.	Dr.R.Padmavathy	*Professor, Dept of CSE,NIT Warangal*	*Present*
3.	Dr.Vinay Raj	*Assistant professor Dept of computer Applications NIT Tiruchirapalli*	*Present*
4.	Mrs.Seema Vodithala	*Enginnering Management-BMJ,BMA House ,Tavistock Square London WC1H 9JR,United Kingdom*	*virtual*
5.	Dr.Kishore Kumar	*University College of Kothagudem Kakatiya University*	*Present*
6.	Sri.S.Pranay	*Academic Relationship Manager,TCS*	*Present*
7.	Sri.Girish Ahankari	*Vice President ,Enginnering at Kore ai Hyderabad*	*Absent*
8.	Dr.N.V.K.Stanley Raju	*Technology Architect Infosys Ltd(STP),Hyderabad*	*Absent*
9.	Sri.Pavan Kumar Chittem	*INFOSYS LIMITED Technology Lead*	*Present*
10.	Shobhana Pingli	*Techanical Consulting Engineer Cx-Enterprise Wireless TAC Cisco Systems India Private Limited*	*Present*

			Present
11.	Vinay Kumar Bajjuri	Senior Consultant OPEN TEXT	Present

Internal BoS Members

12.	Dr.S.Venkatramulu	Assistant professor	Presen
13.	Dr.V.Chandra shekar Rao	Assistant professor	Present
14.	Dr. V. Swathy	Assistant professor	Present
15.	B.Sidhara Murthy	Assistant professor	Present
16.	Dr. Kumar Dorthi	Assistant professor	Present
17.	Dr. A. Godavari	Assistant professor	Present
18.	Sri D. Ramesh	Assistant professor	Present
19.	Mrs. T. Anusha	Assistant professor	Present
20.	Mrs. T. Shruthi	Assistant professor	Present
21.	Mrs. K. Shirisha	Assistant professor	Present
22.	Sri Ch. Jayanth babu	Assistant professor	Present
23.	Sri K.Ravi kanth	Assistant professor	Present
24.	Smt M.Susmitha	Assistant professor	Present
25.	Smt. P. Priyanka	Assistant professor	Present
26.	Sri V. Srinivas	Assistant professor	Present
27.	Smt M. Shirisha	Assistant professor	Present
28.	Smt.M.Priyadarshini	Assistant professor	Present
29.	Sri S. Ravi	Assistant professor	Present

30.	Sri J. Sathish	Assistant professor	Present
31.	M.Soumya	Assistant professor	Present
32.	R.Vijay kumar	Assistant professor	Present
33.	CH.Shiva Kumar	Assistant professor	Present
34.	T.Sravanthi	Assistant professor	Present
35.	Dr.B.V.Pranay Kumar	Assistant professor	Present
36.	K Spandana	Assistant professor	Present
37.	T.Venkatesh	Assistant professor	Present
38.	K.Sai Ram	Assistant professor	Present
39.	L.Sujith Kumar	Assistant professor	Present
40.	K.shruthi	Assistant professor	Present
41.	Y.Soujanya Reddy	Assistant professor	Present

BoS meeting of Computer Science and Engineering (Networks) Department was conducted on 03.08.2024, from 11:00 AM to 1:30 PM Hybrid mode through Microsoft Teams

Ten (10) external members and all the Internal BoS members attended the online meeting conducted through MS Teams platform

All the BoS members offered their valuable suggestions

Details of the meeting

The meeting commenced at 11:00 AM and was presided over by the Chairman, BoS. At the outset, the Chairman, BoS welcomed the members to the meeting to discuss the pre-notified items on the agenda and sought approval.

☐ At the outset, the Chairman presented his views that the engineering programs are required to impart required Knowledge (K), Skills (S) and Qualities (Q) (values

and attitude) and facilitate students to acquire the characteristics of good engineer. The KSQ imparted to the students will make them industry ready and also capable of entering Institutes of National Importance for higher education and research.

☐ The chairman informed the BoS members that industry experts and alumni have been contacted for inputs in preparing URR24 industry ready curriculum. The expected competencies (both Technical and generic competencies) to be demonstrated **by the graduates of B.Tech. CSE (Networks) programs** along with the **target industries/research organizations** have been identified. The courses (theory & Labs) for the B.Tech. CSE (**Networks**) program me have been identified by mapping the desired competencies with courses and prepared the **blueprint of the scheme.**

☐ Learning tracks for Placements (core & IT/ITES), higher education and research are identified for the benefit of students

☐ The members of BoS have been informed about the following new components that are newly introduced in the curriculum under URR24 regulations.

Component introduced	Semester	Total credits	Justification
Multidisciplinary Open Electives Courses (MOPEC)	V, VII & VIII	9	To give exposure on interdisciplinary and cross disciplinary domains.

Practicum	I, II, III &IV	4	For experiential learning to impart problem-solving, critical thinking, and communication skills
Startups & Entrepreneurship (STE) basket	V	3	To inspire and prepare the graduates with startup and entrepreneurial mindset
Social Empowerment Activities (SEA) and Self Accomplishment Activities (SAA)	I, II, III &IV	4	To ensure all dimensional holistic growth of the learner
Expert Talk Series	I, II, III,IV, V &VI	6	To provide graduates with up-to-date industry relevant knowledge and technological trends in their respective fields

The members of BoS have also been informed that as per NEP 2020 guidelines, Multiple Entry Multiple Exit (MEME) option has been introduced in the program me.

S.No.	Exit Description	Exit Point	Degree/Certificate offered	Goal
1.	First Exit	After completion ofFirst year.	UG Certificate inCSE (Networks)	The student should be employable as Technical Assistant CSE (Data Science) in any industry / organization.
2.	Second Exit	After completion ofSecond year.	UG Diploma in CSECSE (Networks)	The student should be employable as Technician (CSE (Data Science)) in any industry/organization.
3.	Third Exit	After completion ofThird year.	B. Voc in CSE (Networks	The student should be employable as Technical Supervisor (CSE (Data Science)) in any industry/organization.

4.	Normal Exit	After completion of Fourth year.	B.Tech. in CSE (Networks)	The student should be employable as an Engineer (CSE (Data Science)) in any relevant industry/organization.

The members of BoS have been informed that the following degrees can be awarded for fast learners (students need to acquire additional credits by completing additional courses/research)

- o B. Tech with "Minor"
- o B. Tech "Honors"
- o B. Tech "Honors with Research"

The BoS members have been informed that the curriculum is designed to offer **four** baskets of Program me Electives, each basket having identified courses corresponding to the program me specializations called verticals. This enables learners to grow in a domain specialization or domain vertical. The student can opt for courses in the sequel (PEC-1 to PEC-4) in any of the specific verticals or across the verticals. If a student completes the sequel of courses PEC-1 to PEC-4 listed under a specific vertical, that specific vertical will be mentioned in his/her degree certificate, as specialization.

- Respected external members have given following inputs and suggestions for the curriculum revision under URR24.

Suggestions Received from External BoS Members:

S.No.	Name	Suggestions / Inputs Received (ATTR)	Action to be Taken (ATR)
1	Dr.V.Shankar Professor, Dept of CSE(N)Warangal	Chairperson, BoS- CSE(N)	
2	Dr.R.Padmavathy Professor, Dept of CSE,NIT Warangal.	1.If possible, Separate the subjects I& Ml. 2. If possible, Separate the Syllabus of TOC and CD	We conveyed; it is not possible. We conveyed; it is not possible.
3.	Dr.Vinay Raj Assistant professor Dept of computer Applications NIT Tiruchirapalli	No Remarks	-
4.	Mrs.Seema Vodithala Enginnering Management-BMJ,BMA House ,Tavistock Square London WC1H 9JR,United Kingdom	No Remarks	-
5.	Dr.Kishore Kumar University College of Kothagudem Kakatiya University	No Remarks	-
6.	Sri Sahay.Pranay Technology Head Next GenR&D COE Technology Software & Services Business Group TCS, Hyderabad.	1.Incoropate GRPC &GNMI Protocols in Network automation course. 2.Internetwork and Virtualization 3.Instead of using Windows OS better to use Linux/Unix.	Concepts can be incorporated in appropriate course. Concepts can be incorporated in appropriate course

7.	Sri.Girish Ahankari Vice President Enginnering at Kore ai Hyderabad	-	-
8	Dr.N.V.K.Stanley Raju Technology Architect Infosys Ltd(STP),Hyderabad	-	-
9.	Sri.Pavan Kumar Chittem INFOSYS LIMITED Technology Lead	No Remarks	-
10.	Shobhana Pingli Techanical Consulting Engineer Cx-Enterprise Wireless TAC Cisco Systems India Private Limited	No Remarks	-
11	Vinay Kumar Bajjuri Senior Consultant OPEN TEXT	1.Instead of practicing regular C & DS lab better to use hacker rank or Leetcode and provide more test cases.	Incorporated in PSD labs

RESOLUTIONS

After deliberations, the BoS in Computer Science and Engineering (Networks) has resolved the following

1. **BoS-URR24 –CSE (Networks)- August 2024 – R1:**

   Resolved to approve the Scheme of Instruction (SoI) of B.Tech. CSE (Networks) program me under URR24

2. **BoS-URR24 - CSE(Networks)- August 2024 – R2:**
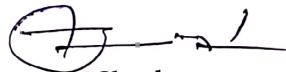
   Resolved to approve the syllabus of B.Tech. CSE (Networks) program me for semesters I & II under URR24

3. **BoS-URR24 - CSE(Networks)- August 2024 – R3:**
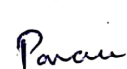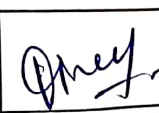
Resolved to approve the rules and regulations of B.Tech. (Networks) programme under URR24

At the end, the Chairperson, BoS, thanked all the BoS members for giving their suggestions and approving the B.Tech CSE (Networks) scheme and syllabus under URR24.
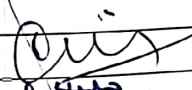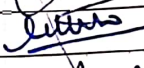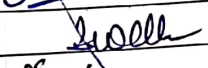
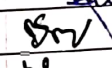The meeting was adjourned at 1.30 pm.
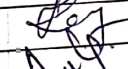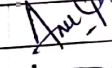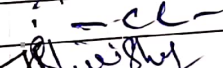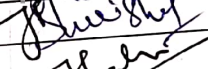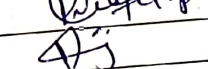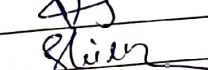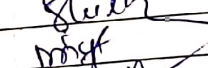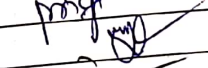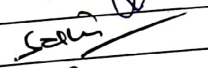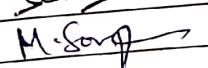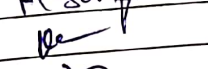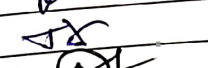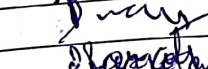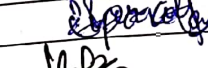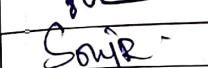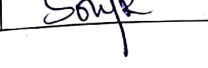
Prof.V.Shankar
Chairperson, BoS of CSE (Networks),
Professor & Head, CSE(N). KITSW

S.No.	Name	Designation	Position in BoS	Attended/not
1	Dr.V. Shankar	Professor &HoD CSE(N),KITSW	Chairperson, BoS	
2	Dr.R.Padmavathy	Professor & Head, Dept of CSE,NIT Warangal	Member (Subject expert from Institute of National Importance)	*signature*
3	Dr.Vinay Raj	Assistant professor, Dept of computer Applications NIT Tiruchirapalli	Member (Subject expert from National Importance)	*signature*
4	Mrs.Seema Vodithala	Engineering Management-BMJ,BMA House ,Tavistock Square London WC1H9JR, United Kingdom	Member (Subject Expert from Outside the country)	
5	Dr.Kishore Kumar	Associate Professor, University College of Kothagudem Kakatiya University	Member (University Nominee)	*Knl*
6	Sri.S.Pranay	Academic Relationship Manager,TCS	Member (Industry representative)	*signature*
7	Sri.Girish Ahankari	Vice President, Enginnering at Kore.ai Hyderabad	Member (Industry representative)	
8	Dr.N.V.K.Stanley Raju	Technology Architect Infosys Ltd(STP),Hyderabad	Member (Industry representative)	
9	Sri.Pavan Kumar Chittem	INFOSYS LIMITED Technology Lead	Member (Industry representative)	Pavan
10	Shobhana Pingli	Techanical Consulting Engineer Cx-Enterprise Wireless TAC Cisco Systems India Private Limited	Member (UG Alumni)	Shobhana
11	Vinay Kumar Bajjuri	Senior Consultant, OPEN TEXT	Member (PG Alumni)	*signature*
12	All Faculty Members			

KITSW-Syllabi for I-II Semesters B.Tech. 4-year Degree Programme] Page 4 of 5

Internal BoS Members:

S.NO	NAME OF THE FACULTY	DESIGNATION	SIGNATURE
1	Dr.V.Shankar	Professor,Head of the Dept	
2	Dr.S.Venkataramulu	Associate Professor	
3	Dr.V.Chandra Skekar Rao	Associate Professor	
4	Dr.V.Swathy	Associate Professor	
5	B.Sidhra Murthy	Assistant Professor	
6	Dr.Kumar Dorthi	Assistant Professor	
7	Dr.A.Godavari	Assistant Professor	
8	D.Ramesh	Assistant Professor	
9	T.Anusha	Assistant Professor	
10	T.Shruthi	Assistant Professor	
11	K.Sirisha	Assistant Professor	
12	Ch.Jayanth Babu	Assistant Professor	
13	K.Ravi Kanth	Assistant Professor	
14	M.Sushmitha	Assistant Professor	
15	P.Priyanaka	Assistant Professor	
16	V.Srinivas	Assistant Professor	
17	M.Shirisha	Assistant Professor	
18	M.Priyadarshini	Assistant Professor	
19	S.Ravi	Assistant Professor	
20	J.Sathish	Assistant Professor	
21	M.Soumya	Assistant Professor	
22	R.Vijay Kumar	Assistant Professor	
23	Ch.Shiva Kumar	Assistant Professor	
24	T.Sravanthi	Assistant Professor	
25	Dr.B.v.Pranay Kumar	Assistant Professor	
26	K.Spandana	Assistant Professor	
27	T.Venkatesh	Assistant Professor	
28	K.Sai Ram	Assistant Professor	
29	L.Sujith Kumar	Assistant Professor	
30	K.Shruthi	Assistant Professor	
31	Y.Soujanya Reddy		

HOD-CSN KITSW <hod.csn@kitsw.ac.in>

Request for approval of SCHEME, SYLLABUS & RULES & REGULATIONS OF URR24-Reg

11 messages

HOD-CSN KITSW <hod.csn@kitsw.ac.in>   Sat, Aug 10, 2024 at 1:24 AM
To: rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, Pavan Kumar <masterchittem27@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>, "vodithala.seema@gmail.com" <vodithala.seema@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in

To
The Members of BoS (External),
CSE(Networks).
                          GOOD EVENING ALL

Sub: Request for approval of URR-24:
1. SCHEME,
2. SYLLABUS &
3. RULES & REGULATIONS.

        With reference to the subject cited above, I thank all the esteemed members of BoS_CSE(Networks) for your presence on 3rd Aug'24 for the Board of Studies (BoS) meeting that was conducted in hybrid mode within the institute at 11:00AM, in IIOT Laboratory Block-VII. I am happy to share that, I, made a presentation successfully on the following agenda points:
1. SCHEME
2. SYLLABUS &
3. Rules and Regulations of URR24.
The suggestions / Inputs given by the respected members were noted and also incorporated.The final draft of the **Scheme, Syllabus and Rules & Regulations** are attached here for your kind approvals.

[You are requested to give approvals on the individual items mentioned in the subject (Like Scheme approved, Syllabus approved and Rules and Regulations are approved)].
                          Thank you all.

Regards:
Dr. V.Shankar
Prof & & Head
CSE(Networks)
KITS, Warangal.
Mobile: 7661058883
mail:hod.csn@kitsw.ac.in

📎 **KITSW_URR24_CSN_SCHEME_SYLLABUS_R&R_09-08-2024.zip**
    22607K

                                                                                          Sat, Aug 10, 2024 at 1:24 AM

Mail Delivery Subsystem <mailer-daemon@googlemail.com>
To: hod.csn@kitsw.ac.in

Message too large

....ldn't be delivered to **vinayraj@nitt.edu**
                          ....ing the message size

Scanned with OKEN Scanner

The response from the remote server was:

552 5.2.3 Message size exceeds maximum value

Final-Recipient: rfc822; vinayraj@nitt.edu
Action: failed
Status: 5.2.3
Remote-MTA: dns; webmail.nitt.edu. (203.129.195.133, the server for the domain nitt.edu.)
Diagnostic-Code: smtp; 552 5.2.3 Message size exceeds maximum value
Last-Attempt-Date: Fri, 09 Aug 2024 12:54:34 -0700 (PDT)

---------- Forwarded message ----------
From: HOD-CSN KITSW <hod.csn@kitsw.ac.in>
To: rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, Pavan Kumar <masterchittem27@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>, "vodithala.seema@gmail.com" <vodithala.seema@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in
Cc:
Bcc:
Date: Sat, 10 Aug 2024 01:24:03 +0530
Subject: Request for approval of SCHEME, SYLLABUS & RULES & REGULATIONS OF URR24-Reg
----- Message truncated -----

Seema Vodithala <vodithala.seema@gmail.com>   Sat, Aug 10, 2024 at 2:05 AM
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>
Cc: rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, Pavan Kumar <masterchittem27@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in

Happy to approve the syllabus, Scheme and rules and regulations

Thank you for the opportunity Sir

Thank you
Seema Vodithala
Engineering Manager - Test
BMJ
London

Sent from my iPhone

On 9 Aug 2024, at 20:54, HOD-CSN KITSW <hod.csn@kitsw.ac.in> wrote:

[Quoted text hidden]

<KITSW_URR24_CSN_SCHEME_SYLLABUS_R&R_09-08-2024.zip>

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vinayraj@nitt.edu <vinayraj@nitt.edu>   Sat, Aug 10, 2024 at 8:57 AM
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>
Cc: HOD-CSN KITSW <hod.csn@kitsw.ac.in>, rpadma@nitw.ac.in, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, Pavan Kumar <masterchittem27@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in, vodithala.seema@gmail.com

...al.google.com/...

Dear Professor,
Greetings!

As discussed during the BoS meeting, I give my approval.
Scheme is approved
Syllabus is approved
Rules & Regulations is approved.

Thanks,
Dr. Vinay Raj
Assistant Professor,
Dept. of Computer Applications,
NIT Tiruchirappalli

Quoting Seema Vodithala <vodithala.seema@gmail.com>:

[Quoted text hidden]

Pranay Sahay <pranay.rsahay@tcs.com>   Sat, Aug 10, 2024 at 5:46 PM
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>

TCS Confidential

Dear Prof. Shankar

Approved from my end.

Thank you

Regards

Pranay

From: vinayraj@nitt.edu <vinayraj@nitt.edu>
Sent: Saturday, August 10, 2024 8:58 AM
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>; rpadma@nitw.ac.in; Pranay Sahay <pranay.rsahay@tcs.com>;
Cc: HOD-CSN KITSW <hod.csn@kitsw.ac.in>; Pavan Kumar <masterchittem27@gmail.com>; pingili shobhana
Raj Kamal <rajnvk123@gmail.com>; Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>; Girish@kore.ai;
<pingilishobhana@gmail.com>; Vinay Kumar Bajjuri
vs.csn@kitsw.ac.in; vodithala.seema@gmail.com
Subject: Re: Request for approval of SCHEME, SYLLABUS & RULES & REGULATIONS OF URR24-Reg

External Email : Be cautious while opening any links or attachments.

[Quoted text hidden]

Scanned with OKEN Scanner

Pavan Kumar <masterchittem27@gmail.com>   Sat, Aug 10, 2024 at 5:53 PM
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>
Cc: rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, pingili
shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>,
"vodithala.seema@gmail.com" <vodithala.seema@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in

Respected Sir,

Approved for Scheme, Syllabus, Rules and Regulations.

Thank you for the opportunity Sir!!

Best Regards,
Pavan Kumar Ch

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  [Quoted text hidden]
  [Quoted text hidden]

Sat, Aug 10, 2024 at 9:16 PM

Girish Ahankari <girish.ahankari@kore.com>
To: Pavan Kumar <masterchittem27@gmail.com>, rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj
Cc: HOD-CSN KITSW <hod.csn@kitsw.ac.in>, rpadma@nitw.ac.in, pingilishobhana@gmail.com>, Vinay Kumar Bajjuri
Kamal <rajnvk123@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, <vodithala.seema@gmail.com>, Girish@kore.ai,
<vinaykumar.bajjuri@gmail.com>, "vodithala.seema@gmail.com" <vodithala.seema@gmail.com>,
vs.csn@kitsw.ac.in

Approved.

Kind regards,

Girish Ahankari / EVP, Engineering (NLP & Machine Learning)
girish@kore.ai / +91-9866225600

www.linkedin.com/in/girishahankari

Leader Again! Kore.ai is named a leader in the Forrester Wave™ Conversational AI Customer Service, Q2 2024.

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Sun, Aug 11, 2024 at 7:30 AM

Raj Kamal <rajnvk123@gmail.com>
To: Girish Ahankari <girish.ahankari@kore.com>, HOD-CSN KITSW <hod.csn@kitsw.ac.in>, rpadma@nitw.ac.in,
Cc: Pavan Kumar <masterchittem27@gmail.com>, pingili shobhana <pingilishobhana@gmail.com>, Vinay Kumar Bajjuri
vinayraj@nitt.edu, pranay.rsahay@tcs.com, "vodithala.seema@gmail.com" <vodithala.seema@gmail.com>, Girish@kore.ai,
<vinaykumar.bajjuri@gmail.com>, "vodithala.seema@gmail.com"
vs.csn@kitsw.ac.in

Respected Sir,

Approved for Scheme, Syllabus, Rules and Regulations.

Thank you for the opportunity Sir!!

Dr. Raju.N.S
Hyderabad.

...le.com/mail/u/0/?ik=d60d8dfb86&view=pt&search=all&permthid=thread-a:r-7741142726700601707&simpl=msg-a:r63923642639...   4/5

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PADMAVATHY R <rpadma@nitw.ac.in>
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>

Sun, Aug 11, 2024 at 9:57 AM

Approved

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　[Quoted text hidden]

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pingili shobhana <pingilishobhana@gmail.com>
To: HOD-CSN KITSW <hod.csn@kitsw.ac.in>
Cc: rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj Kamal <rajnvk123@gmail.com>, Pavan Kumar <masterchittem27@gmail.com>, Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>, "vodithala.seema@gmail.com" <vodithala.seema@gmail.com>, Girish@kore.ai, vs.csn@kitsw.ac.in

Sun, Aug 11, 2024 at 8:43 PM

Respected sir
Greetings for the day!

I am writing this email to inform you that Scheme, Syllabus, Rules and Regulations have been approved.

Thank you for giving me this opportunity.

Regards,
Shobhana Pingili
Technical Consulting Engineer
CISCO

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　[Quoted text hidden]
　[Quoted text hidden]

Vinay Kumar Bajjuri <vinaykumar.bajjuri@gmail.com>
To: pingili shobhana <pingilishobhana@gmail.com>, rpadma@nitw.ac.in, vinayraj@nitt.edu, pranay.rsahay@tcs.com, Raj
Cc: HOD-CSN KITSW <hod.csn@kitsw.ac.in>, Pavan Kumar <masterchittem27@gmail.com>, vodithala.seema@gmail.com,
Kamal <rajnvk123@gmail.com>,
Girish@kore.ai, vs.csn@kitsw.ac.in

Sun, Aug 11, 2024 at 9:05 PM

Respected Sir,

Approved for Scheme, Syllabus, Rules and Regulations.

Thank you for the opportunity Sir!!

Best Regards,
Vinay kumar B
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PROGRAMMING FOR PROBLEM SOLVING WITH C

Class: B.Tech. I -Semester		Branch: Common to all branches	
Course Code:	U24CS104	Credits:	4
Hours/Week (L-T-P-O-E):	2-1-2-5-10	CIE Marks (%):	50
Total Number of Teaching Hours:	60 Hrs	ESE Marks (%):	50

Course Learning Objectives (LOs):

This course will develop students' knowledge in /on...

LO1: algorithms, flow charts and develop programs with basic constructs

LO2: control structures and array operations

LO3: string operations and modular programming concepts with functions and recursion

LO4: structures, unions, pointers and files in C programming

THEORY COMPONENT

UNIT-I	9 Hrs

Introduction to Programming: Art of programming through algorithms and flowcharts

Overview of C: History of C, Importance of C, Basic structure of C programs

Constants, Variables and Data Types: Character set, C tokens, Declaration of variables, Defining symbolic constants

Managing Input and Output Operations: Reading a character, Writing a character, Formatted input, Formatted output

Operators and Expressions: Arithmetic, Relational, Increment, Decrement, Conditional, Logical, Bit-wise, Special operators, Arithmetic expressions, Evaluation of expressions, Operator precedence and associativity

Self Learning Topics (SLTs): Components of a computer, concept of hardware and software (Text1: chapter 1), Executing a C program (Text1: chapter 2), Type conversions in expression (Text1: chapter 4) Solved problems (Text1: chapter 2 to chapter 5), Review questions, debugging exercises, programming exercises, interview questions (Text1: chapter 2 to chapter 5)

UNIT-II	9 Hrs

Decision Making and Branching: Simple if statement, if-else statement, Nesting of if-else statements, else if ladder, switch statement, Conditional operator, goto statement

Decision Making and Looping: while statement, do-while statement, for statement, Nested loops, Jumps in loops

Arrays: One-dimensional arrays, Declaration of one-dimensional arrays, Initialization of one-dimensional arrays, Linear search, Two-dimensional arrays, Initializing two dimensional arrays, Multi-dimensional arrays

Self Learning Topics (SLTs): Concise test expressions (Text1: chapter 7) Dynamic arrays (Text1: chapter 8), Solved problems (Text1: chapter 6 to chapter 8), Review questions, debugging exercises, programming exercises, interview questions (Text1: chapter 6 to chapter 8)

UNIT-III	9 Hrs

Character Arrays and Strings: Declaring and initializing string variable, Reading strings from terminal, Writing strings to screen, String handling functions, Table of strings

Modular Programming with User Defined Functions: Need for user-defined functions, Elements of user-defined functions, Definition of functions, Return values and their types, Function calls, Function declaration, Category of functions, Recursion, The scope, visibility and lifetime of variables (storage classes)

Self Learning Topics (SLTs): *Arithmetic operations on characters, comparison of strings (Text1: chapter 9), Nesting of functions, (Text1: chapter 10), Solved problems (Text1: chapter 9 & chapter 10), Review questions, debugging exercises, programming exercises, interview questions (Text1: chapter 9 & chapter 10).*

UNIT-IV	
Structures and Unions: Defining a structure, Declaring and initializing structure variables,	**9 Hrs**

Accessing structure members, Array of structures, Structures within structures, Unions
Pointers: Understanding pointers, Declaring and initializing pointer variables, Pointer expressions, Pointers and arrays, Pointers and character strings, Pointers to functions, Pointers and structures.

File Management in C: Defining and opening a file, Closing a file, Input and output operations on sequential text files

Self Learning Topics (SLTs): *Operations on individual members (Text1: chapter 11), Chain of pointers, array of pointers (Text1: chapter 12), Random access to files, Command line arguments (Text1: chapter 13). Solved problems (Text1: chapter 11 to chapter 13), Review questions, debugging exercises, programming exercises, interview questions (Text1: chapter 11 to chapter 13).*

LABORATORY COMPONENT
List of Experiments

1. Programs using input output functions, operators (arithmetic, relational and conditional)
2. Programs using operators (bit-wise, logical, increment and decrement)
3. Programs using conditional control structures: if, if-else, nested if
4. Programs using else if ladder, switch and goto statements
5. Programs using loop control structures: while
6. Programs using loop control structures: do-while and for
7. Programs on one dimensional array and two-dimensional arrays
8. Programs on String operations and string handling functions
9. Programs on different types of functions, parameter passing using call-by-value & call-by-address, recursion and storage classes
10. Programs using structures, unions, pointers to arrays and pointers to strings
11. Programs using array of pointers and pointers to structures
12. Programs on File operations and file handling functions for sequential text files

Textbook(s):

1. Balagurusamy.E, *Programming in ANSI C*, McGraw Hill, 8th edition, 2022

Reference Book(s):

1. Paul Deitel, Harvey Deitel, *C How to Program: With Case Studies Introducing Applications Programming and Systems Programming*, Pearson Education Limited, 9th edition, 2022
2. Brian W. Kernighan and Dennis Ritchie, *The C Programming Language*, Pearson Education India, 2nd edition, 2015
3. Reema Thareja, *Programming in C*, Oxford University Press, 3rd edition, 2023
4. Yashavant Kanetkar, *Let Us C*, BPB Publications, 19th edition, 2022
5. A.K.Sharma, *Computer Fundamentals and Programming in C*, Universities Press, 2nd edition, 2018

Web and Video link(s):

https://nptel.ac.in/courses/106105171   NPTEL Video Lecture on Problem Solving through Programming in C by Prof. Anupam Basu, Professor of CSE, IIT Kharagpur.

https://nptel.ac.in/courses/106104128 NPTEL Video Lecture on Introduction to Programming in C by Prof. Satyadev Nandakumar, Professor of CSE, IIT Kanpur

Laboratory Manual (for laboratory component):

1. Programming for Problem Solving with C Laboratory Manual and Record Book, Department of CSE, KITSW.

Course Learning Outcomes (COs):

After completion of this course, the students should be able to,

(based on cognitive skills acquired from theory component)

CO1: enumerate programming development steps, design an algorithm and draw a flow chart for a given application

CO2: apply logical skills for problem solving using control structures and arrays

CO3: develop string operations and modular programming with functions

CO4: analyse and implement structures, unions, pointers and files in C programming

(based on psychomotor skills acquired from laboratory component)

CO5: develop programs using operators and decision making statements

CO6: apply loops and arrays to develop a program of an application

CO7: implement string operations and develop modular programs using user-defined functions, recursion, and storage classes.

CO8: develop programs using structures, unions, pointers and files

Course Articulation Matrix (CAM):		U24CS104: PRAGRAMMING FOR PROBLEM SOLVING WITH C												
\multicolumn{2}{l}{CO}	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	U24CS104.1	2	1	1	1	-	-	-	1	-	1	-	2	1	2
CO2	U24CS104.2	2	2	2	1	-	-	-	1	-	1	-	2	2	2
CO3	U24CS104.3	2	2	3	1	-	-	-	1	-	1	-	2	2	2
CO4	U24CS104.4	2	2	3	2	-	-	-	1	-	1	-	2	2	2
CO5	U24CS104.5	1	1	1	1	1	-	-	1	1	1	-	2	1	2
CO6	U24CS104.6	1	2	2	2	1	-	-	1	1	1	-	2	2	2
CO7	U24CS104.7	1	2	3	2	1	-	-	1	1	1	o	2	2	2
CO8	U24CS104.8	1	2	3	2	1	-	-	1	1	1	-	2	2	2
\multicolumn{2}{l}{U24CS104}	1.5	1.75	2.25	1.5	1	-	-	1	1	1	-	2	1.75	2