## G. NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE

#### **AUTONOMOUS**

(FOR WOMEN)



### (Accredited by NBA of AICTE & NAAC of UGC)



# Department of Information Technology M.Tech - Computer Networks and Information Security (CNIS)

# Minutes of the Second Board of Studies Committee (for CNIS) Meeting held at the Department of Information Technology, GNITS (for Women):

- The Board of Studies Committee of the M.Tech(CNIS), GNITS, Hyderabad, has been instituted with effect from 10-08-2021 (for a period of 3 years), with the following members:
  - 1. Dr. I.Ravi Prakash Reddy, Professor & Head, GNITS, HYD.
  - 2. Dr. G Vijaya Kumari, Professor, CSE, JNTUH, HYD.
  - 3. Dr.P.Krishna Reddy, Professor, IIITH, HYD.
  - 4. Dr. Chakravaty Bhagvati, Professor, SCIS, UOH.
  - 5. Dr. Raghavendra Kune, Scientist "AF", ADRIN, HYD.
  - 6. Dr. S.Ramacharan, Professor, IT, GNITS, HYD.
  - 7. Dr. Ch.Anitha, Professor, IT, GNITS, HYD.
  - 8. Mr.B.V.Prasad Babu, Assoc. Professor, IT, GNITS, HYD.
  - 9. Mr. C.Sudhakar Reddy, Assoc. Professor, IT, GNITS, HYD.
  - 10. Dr. V. Supriya, Assoc. Professor, IT, GNITS, HYD.
  - 11. Dr. S Prabavathy, Assoc. Professor, IT, GNITS, HYD.
  - 12. Dr. A Vijaya Krishna, Asst. Professor, IT, GNITS, HYD.
  - 13. Dr. Susmitha Mandal, Asst. Professor, IDRBT, HYD.

- BoS Chairman
- University Nominee
- Subject Expert
- Subject Expert
- Industry Member
- Internal Member
- Alumnae Member
- The Second BoS meeting of the M.Tech(CNIS) was held on 24-09-2022, at the IT Department, CC-3 Lab, GNITS, Hyderabad.

#### Minutes of the Second BoS Meeting of CNIS:

- Dr. I.Ravi Prakash Reddy, BoS Chair, extended a cordial welcome to all the members of the BoS Committee, for the Second BoS Meeting of M.Tech(CNIS) (after attaining the UGC Autonomous Status in April 2018), and introduced all the members.
- 2) After lengthy deliberations and progressive discussions, all the Members of the BoS for M.Tech(CNIS) have unanimously approved the following -
  - a) The Academic Regulations for M.Tech. Programme (with 68 Credits) in IT Department (GNITS-2022 PG Academic Regulations) with CNIS specialization, as per contents enclosed.
  - b) The Two Year 4 Semester PG Degree Course Structure for M.Tech. Programme in IT Department with Computer Networks & Information Security (CNIS) specialization, with a total of 68 Credits, as per contents enclosed.
  - c) The Course Contents and Syllabi of all the Courses/Subjects of the 4 Semester M.Tech. Programme in IT with CNIS specializations, as per details enclosed.
- As per suggestions of BoS committee, the following changes were made in the CNIS Course Structure.
  - a) Adhoc and Sensor Networks offered as PSE-1 is replaced with Distributed Systems.

Rochan.

Just

- b) Cyber Security offered as PSE-2 is replaced with Malware Analysis. As Cyber Security and Information Security both are important courses, Cyber Security was decided to be offered as PSE-4.
- c) Biometrics offered as PSE-3 is replaced with Digital Forensics.
- d) Minor changes were made in the following course contents.
  - Mathematical Foundations of Cryptography
  - Information Security
  - Web and Database Security
  - Blockchain Technology
- 4) The BoS Committee formally authorized the BoS Chair of M.Tech(CNIS), to include any minor modifications or corrections needed for the PG Course Structures and Academic Regulations (2022) at later dates, if approved and recommended by the IT Department Advisory Committee.
- 5) The BoS Committee formally authorized the BoS Chair of M.Tech(CNIS), to suggest the Panel of Question Paper Setters, Examiners and Evaluators required for all the Subjects/Courses offered by IT Department, and for those listed in the M.Tech(CNIS) Course Structure (2022).

Number of New Courses Introduced	Number of Courses Modified (Modified content >=20%)	Number of deleted courses	
9	6	5	

(wrt GNITS-CNIS-R18)

#### **Signatures of the Members Present:**

S.No.	Name & Designation	Member Category	Signature
1.	Dr. I.Ravi Prakash Reddy, Professor & Head, IT, GNITS, HYD.	BoS Chair	Lonient my
2.	Dr. G Vijaya Kumari, Professor, CSE, JNTUH, HYD.	University Nominee	grand.
3.	Dr.P.Krishna Reddy, Professor, IIITH, HYD.	Subject Expert	Medy
4.	Dr. Chakravaty Bhagvati, Professor, SCIS, UOH.	Subject Expert	1/2k
5.	Dr. Raghavendra Kune, Scientist "强石", ADRIN, HYD.	Industry Member	Regio
6.	Dr. S.Ramacharan, Professor, IT, GNITS, HYD.	Internal Member	1
7.	Dr. Ch.Anitha, Professor, IT, GNITS, HYD.	Internal Member	ch. Anitha
8.	Mr.B.V.Prasad Babu, Assoc. Professor, IT, GNITS, HYD.	Internal Member	Alaska
9.	Mr. C.Sudhakar Reddy, Assoc. Professor, IT, GNITS, HYD.	Internal Member	SARAD
10.	Dr. V. Supriya, Assoc. Professor, IT, GNITS, HYD.	Internal Member	\$ -
11.	Dr. S. Prabavathy, Assoc. Professor, IT, GNITS, HYD.	Internal Member	s. Oyle.
12.	Dr. A. Vijaya Krishna, Asst. Professor, CST, GNITS, HYD.	Internal Member	A The state of the
13.	Dr. Susmitha Mandal, Asst. Professor, IDRBT, HYD.	Alumnae Member	Smande

# **Department of Information Technology**

# M.Tech(CNIS)

S. No.	Broad Course Classification	Course Group/ Category	Courses Description	Credits
1)	Core Courses (CoC)	PC - Professional Core	Includes Core subjects related to the Parent Department/ Branch of Engg.	18
2)	Elective Courses	PSE – Program Specific Elective	Includes Elective subjects related to the Parent Department/ Branch of Engg.	15
3)	(E&C)	OE - Open Elective	Elective Courses which include subjects from other technical and/or Emerging Areas	3
	Project	PW - Project Work	M.Tech. Project or PG Project or PG Major Project (Phase-I and Phase-II)	26
		Mini-Project (MP)	Mini-Project over 1 semester duration	2
		Seminar	Seminar based on core contents related to the Parent Department/ Branch of Engg. in identified specialization	2
5)	Prescribed Course	Curriculum   Research Methodology & IPR		2
6)	Audit Courses	122 12 12 12 12 12 12 12 12 12 12 12 12		No Credits
	Total Cr	edits for PGDP (F	For the Specializations Listed)	68

# M. Tech CNIS Syllabus Comparison GNITS-R22 with GNR-18

Number of New Courses Introduced	Number of Courses Modified (Modified content >=20%)	Number of deleted courses	
9	6	5	

#### List of New Courses:

S.No	Subject Name	Year and Sem
1	Program Specific Elective 1     Wireless Networks Mobile Computing     Distributed Systems	I Year –I Sem
2	Seminar - 1	İ Year –I Sem
3	Soft Computing .	I Year -II Sem
4	Program Specific Elective 3     Secure Software Engineering     Cloud Security	I Year – II Sem
5	Program Specific Elective 4     Internet of Things and Security     Web and Database Security	I Year – II Sem
6	<ul> <li>Program Specific Elective 4 Lab</li> <li>Internet of Things and Security Lab</li> <li>Web and Database Security Lab</li> <li>Cyber Security Lab</li> </ul>	I Year – II Sem
7	Seminar - 2	I Year - II Sem
8	Program Specific Elective 5  • Block chain Technology  • Intrusion Detection and Prevention Systems  • Ethics and Laws of Cyber Security	II Year – I sem
9	Project Management and Planning(OE)	II Year – I sem

# List of Modified Courses (Modified content >=20%)

S.No	Subject Name	Year and Sem
1.	Mathematical Foundations of Cryptography	I Year –I Sem
2	Disaster Management	I Year –I Sem
3	Program Specific Elective 4 Cyber Security	I Year –II Sem
4	Advanced Algorithms	I Year -II Sem
5	Advanced Algorithms Lab	I Year -II Sem
6	Business Analytics(OE) Cost management of Engineering Projects(OE)	II Year –II Sem

## List of deleted courses

S.No	Subject Name	Year and Sem
1	Program Specific Elective 1  Computer Networking  Network Programming	I Year -I Sem
2	Program Specific Elective 2  Intrusion Detection Information Theory & Coding	I Year –I Sem
3	Lab - Program Specific Elective 1  Computer Networking  Network Programming  TCP/IP Internetworking	I Year –I Sem
4	<ul> <li>Program Specific Elective 3</li> <li>Cloud Computing</li> <li>Storage Area Networks</li> <li>Distributed Databases</li> </ul>	I Year – II Sem
5	Program Specific Elective 5  Wireless Networks  Network Security Standards and Applications Evaluation	II Year-I Sem

**BoS Chair**