DEPARTMENT OF COMPUTER SCIENCE
NALLAMUTHU GOUNDER MAHALINGAM COLLEGE
(AUTONOMOUS)
Re-Accredited by NAAC and 9001 : 2015 Certified Institution
Ranked 72nd among Colleges in India by MHRD - NIRF
Affiliated to Bharathiar University, Coimbatore
POLLACHI – 642 001

Meeting of the Board of Studies in Computer Science

Date : 22ND MAY 2021   Venue : ONLINE – MICROSOFT TEAMS

Day :   Saturday   Time   : 10.00 A.M.

The Meeting of the Board of Studies in Computer Science – UG was held on Saturday, 22nd May 2021 at 10.00 a.m through online mode – Microsoft Teams.

OFFICIAL AGENDA

1. The Syllabi and scheme of Examinations for UG Degree BSc. Computer Science Academic Year 2021 -24 was presented for discussion and scrutiny by the respective course teachers.

2. The continuous Assessment programme for the candidates admitted during the Academic Year 2021 -24 were revised as per the recommendations of the affiliating university – Bharathiar University.

3. The Panel of Examiners for theory and practical Examinations were prepared.

4. The Academic Auditor has presented the outcome of the Academic Audit.

5. The Course Outcome (CO) and Programme Outcome (PO) Mapping and Creation of Rubrics were recorded in each course as per the instructions from the Curriculum Development Council of NGM College.

Members Present

Chairman
1. Dr. Antony Selvadoss Thanamani, Associate Professor & Head, NGM College, Pollachi
Members & External Experts
2. Dr.A.Geetha, Associate Professor and Head, PG and Research, Department of Computer Science, Chikkanna Govt arts college Tirupur. geethagac07@gmail.com. 9442919607. **(Subject Expert)**
3. Dr. K Karthikeyan, Associate Professor and Head, Department of Computer Science,

Puratchi Thalaivi Amma Government Arts and Science College Palladam, gackarthi73@gmail.com 9842272503. **(Subject Expert)**

4. Aarthy Thiyagarajan, Toshiba Software India Pvt Ltd,Bangalore. 9952812013. **(Industrial Expert)**

5. Rishop Babu, Optisol Business solutions, Chennai. **(Industrial Expert)**

6. Dr.S.Kanchana Asssociate Professor Department of Computer Science, SRM Institute of Science & Technology, Kattankulathur, Chennai. Ph: 94444 68583 **(Academic Auditor)**

7. Dr. N. Raveendran, Scientist 'F', National Informatics Centre, New Delhi **(Alumini)**

8. Dr. R.Manicka Chezian, Associate Professor, NGM College, Pollachi

9. Thiru. K.Srinivasan, Associate Professor, NGM College, Pollachi

10. Dr. Aruchamy Rajini, Assistant Professor, NGM College, Pollachi

11. Ms. M. Malathi, Assistant Professor , NGM College, Pollachi

12. Dr. M. Sakthi, Associate Professor & Head (Self-Financing) , NGM College, Pollachi

13. Dr. R. Nandhakumar, Assistant Professor, NGM College, Pollachi

14. Dr. R. Deepa, Assistant Professor, NGM College, Pollachi

15. Mrs. M. Dhavapriya, Assistant Professor, NGM College, Pollachi

16. Mrs S.Sharmila, Assistant Professor , NGM College, Pollachi

17. Mrs. N. Yasodha, Assistant Professor, NGM College, Pollachi

18. Mrs. M. Meena Kritihika, Assistant Professor, NGM College, Pollachi

19. Mrs. S. Shanthi, Assistant Professor, NGM College, Pollachi

20. Mr. N. Arul kumar, Assistant Professor, NGM College, Pollachi

21. Mr. N.Karthikeyan, Assistant Professor, NGM College, Pollachi

22. Dr. A. Kanagaraj, Assistant Professor, NGM College, Pollachi

23. Mrs. P.Jayapriya, Assistant Professor, NGM College, Pollachi

24. Mrs. S. Vallinayagam, Assistant Professor, NGM College, Pollachi

25. Mr. A.Muruganandham, Assistant Professor, NGM College, Pollachi

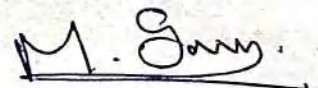** BOS held through online mode hence no individual signatures were obtained

Chairman

Principal

ANNEXURE I

Minutes of the 10th Meeting – Action Taken Report

S.No	Suggestion given by expert members	Action taken
1	Included case studies in Design and Analysis of Computer Algorithms	Reviewed and Implemented
2	Included NoSQL concepts in Advanced Database Management System	Implemented
3	Introduced Big Data Analytics as a new paper	Implemented
4	Introduced Cloud Computing as a new paper	Implemented
5	Data Science	Implemented
6	AI & Machine Learning has been introduced in Elective-III	Implemented

HoD

Dr. M.SAKTHI, M.Sc.,M.Phil.,Ph.D.,
Associate Professor & Head
PG Department of Computer Science
NGM College, Pollachi - 642 001.

List of Courses having focus on local, national, regionaland global developmental needs offered by the M.Sc Computer Science

PG COMPUTER SCIENCE						
Programme: M.Sc						Year: 2021
Course Code	Course Title	Need				Rationale
		Local	National	Regional	Global	
21PCS101	Design & Analysis of Algorithms	✓				It also helps to design and analyze the logic on how the program will work before developing the actual code for a program
21PCS102	Data Mining and Warehousing		✓			extract valuable information from available data, uncovering patterns and finding anomalies and relationships in large datasets
21PCS103	Advanced Operating System		✓			an operating system can manage how to divide the program so that it runs on more than one processor at a time
21PCS104	Advanced Database Management System				✓	provides a centralized view of data that can be accessed by multiple users, from multiple locations, in a controlled manner
21PCS206	Android Programming				✓	may need to address business requirements or build new services or businesses, or they may want to offer games and other types of content for users
21PCS207	Cloud Computing				✓	provides flexible resource allocation on demand with the promise of realizing elastic, Internet-accessible, computing on a pay-as-you-go basis.
21PCS208	Big Data Analytics				✓	leads to smarter business moves, more efficient operations
21PCS209	Advanced		✓			provides libraries to understand the concept of Client-Server

Code	Course						Description
	Java Programming						architecture for web- based applications
21PCS311	Internet of Things					✓	have devices that self report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention.
21PCS312	Network Security & Cryptography					✓	a stable and efficient network security system is essential to protecting client data
21PCS313	Python Programming					✓	most accessible programming langua ges available because it has simplified syntax
21PCS314	Digital Image Processing		✓				Extract from an image quantitative information that is not readily apparent to the eye, and to calibrate an image in photometric or geometric terms
21PCS1E1	Advanced Networks		✓				enriches our understanding of phenomena such as riots, violence, and social and biological epidemics
21PCS2E1	Software Project Management	✓					important role in an organization by giving insights into project progress, performance, and inventory tracking
21PCS3E1	Artificial Intelligence & Machine Learning					✓	makes it possible for machines to learn from experience, adjust to new inputs and perform human-like tasks
21PCS3E2	Data Science					✓	Uses various statistical techniques to analyze and draw insights from the data. From data extraction, wrangling and pre-processing, a Data Scientist must scrutinize the data thoroughly

| 21PCS2P1 | Pilot Project – I | | | | ✓ | enables to manage the risk of a new idea and identify any deficiencies before substantial resources are committed |
| 21PCS4P2 | Project Work and Viva-Voce | | | | ✓ | explore the various functional areas and analyze how theoretical concepts taught are applied in real life situations |

M. Sam

HoD

Dr. M.SAKTHI, M.Sc.,M.Phil ...,
Associate Professor & He...
PG Department of Computer Science
NGM College, Pollachi - 642 00...

✓ Principal

List of Courses having focus on employability/ entrepreneurship/ skill development offered by the M.Sc Computer Science

PG COMPUTER SCIENCE						
Programme: M.Sc					Year:2021	
Course Code	Course Title	Employability (EM) / Entrepreneurship (EN) / Skill Development (SD)			Focus	Year of Introduction
		EM	EN	SD		
21PCS101	Design & Analysis of Algorithms			✓	Algorithm Design	2010
21PCS102	Data Mining and Warehousing	✓			Server Administration	2010
21PCS103	Advanced Operating System	✓			Operating System Cert/Qual Engineer	2010
21PCS104	Advanced Database Management System	✓			Database Management	2018
21PCS206	Android Programming		✓		Android Developer	2014
21PCS207	Cloud Computing			✓	Cloud Administrator	2020
21PCS208	Big Data Analytics	✓			Data Architect	2016
21PCS209	Advanced Java Programming			✓	Java Web Developer	2014

21PCS311	Internet of Things		✓		Iot Architect	2017
21PCS312	Network Security & Cryptography		✓		Cyber Security Engineer	2018
21PCS313	Python Programming			✓	Python Developer	2019
21PCS314	Digital Image Processing			✓	Image Processing Engineer	2013
21PCS1E1	Advanced Networks	✓			Network Architect	2010
21PCS2E1	Software Project Management	✓			Project Developer	2021
21PCS3E1	Artificial Intelligence & Machine Learning		✓		Ai Data Analyst Machine Learning Engineer	2021
21PCS3E2	Data Science	✓			Data Scientist	2021
21PCS2P1	Pilot Project – I		✓		Android App Developer	2015
21PCS4P2	Project Work and Viva-Voce		✓		Software Developer	2010

S.No	Course Code	Course Title	Change Details	% of Changes	Content Deleted	Content Updated	Reason for Change
1	21PCS104	Advanced Database Management System	Unit - III,Unit-IV,Unit-V	60%	Transcation processing,Concurrency control techniques,Mongo db,Neo4j.	Advanced SQL,NoSQL,Hybrid SQL	Subject Expert
2	21PCS206	Android Programming	Unit-V	10%	Nil	Unit-V: Case Study: Android Operating System- Architecture, Security Challenges and Solutions.	Subject Expert
3	21PCS210	Programming Lab II: Android Programming		50%	Programs for separate UI controls were removed.	Programs for applications are newly added.	Subject Expert
4	21PCS101	Design & Analysis of Algorithms	Unit-V	20%	0/1 Knapsack problem – LC Branch and Bound solution – FIFO Branch and Bound solution – Traveling salesperson	Case study: Activity or Task Scheduling Problem- Median of the two sorted arrays-Sudoku	Subject Expert
5	21PCS103	Advanced Operating System	New	100%	New	New	Subject Expert / Course Teacher
6	21PCS104	Advanced Database Management System	Unit - III,Unit-IV,Unit-V	60%	Transcation processing,Concurrency control techniques, Mongo db,Neo4j.	Advanced SQL,NoSQL,Hybrid SQL	Subject Expert
7	21PCS105	Programming Lab I: Design & Analysis of Algorithms	Programs	20%	Basic Programs were removed.	New programs are added.	Subject Expert
8	21PCS1E1	Elective – I Advanced Networks	Unit-V	20%	MIME	Unit-V : Case Study - TCP/IP framework case study	Subject Expert / Course Teacher
9	21PCS1E2	Elective – I Wireless Networks	New	100%	New	New	Course Teacher
10	21PCS1E3	Elective – I Mobile Computing	Unit-V	10%	Nil	Unit - V: Wireless Devices with Windows CE: Different Flavors of Windows CE – Windows CE Architecture.	Course Teacher
11	21PCS1N1	Non-Major	New	100%	New	New	CDC

		Elective I : Multimedia Packages Lab					instructions NME is introduced
12	21PCS1N2	Non-Major Elective I : Desktop Publishing Lab	New	100%	New	New	CDC instructions NME is introduced
13	21PCS207	Cloud Computing	New	100%	New	New	Subject Expert/University Nominee
14	21PCS208	Big Data Analytics	New	100%	New	New	Subject Expert
15	21PCS2E1	Elective – II Software Project Management	New	100%	New	New	Subject Expert
16	21PCS2E2	Elective – II Software Engineering and Testing	New	100%	New	New	Subject Expert
17	21PCS2N1	Non Major Elective II: Web Designing Lab (General Supportive - II)	New	100%	New	New	CDC instructions NME is introduced
18	21PCS2N2	Non Major Elective II: Advanced Internet Technologies Lab	New	100%	New	New	CDC instructions NME is introduced
19	21PCS312	Network Security & Cryptography	Unit III,Unit V	15%	one Topic	Key Cryptosystems: Pseudorandom Number Generation Based on an Asymmetric Cipher.	Course Teacher
20	21PCS313	Python Programming	Title, Unit-IV , Text Books	10%	Nil	Data Ploting and VizualizationTechniques	Course Teacher
21	21PCS3E1	Elective-III Artificial Intelligence & Machine Learning	New	100%	New	New	Subject Expert/University Nominee

22	21PCS3E2	Elective-III Data Science	New	100%	New	New	New Subject based on Current Needs
23	21PCS3E3	Elective-III Robotic Process Automation for Business	New	100%	New	New	New Subject based on Current Needs
24	21PCS3N1	Non Major Elective III: Visual Basic Lab (General Supportive - III)	New	100%	New	New	CDC instructions NME is introduced
25	21PCS3N2	Non Major Elective III:2D Animation Lab.	New	100%	New	New	CDC instructions NME is introduced

HoD

Dr. M.SAKTHI, M.Sc.,M.Phil.,Ph.D .

Associate Professor & Head

PG Department of Computer Science

Percentage of Revision of M.Sc Computer Science Syllabus under Regulation 2021 – 2023 Batch

NGM College, Pollachi - 642 001,

Principal

HoD

Dr. M.SAKTHI, M.Sc.,M.Phil.,Ph.D..

Associate Professor & Head

PG Department of Computer Science

NGM College, Pollachi - 642 001,

Principal