Department of Computer Science

Holy Cross College (Autonomous)

Nationally Re-Accredited with A+ by NAAC (CGPA 3.35-IV Cycle),

Nagercoil-629004, Kanyakumari District, Tamil Nadu, India.

Minutes of the Board of Studies meeting of the Department of Computer Science held on 24.01.2020 at 11.00 AM

Ref. No: COMP / BoS 2019-2020 / XII

Members

Sr.Jothi Antony	-	HOD and Chairperson, Dept. of Computer Science, Holy Cross College, Nagercoil
Dr. D. Glory Ratna Mary	-	University nominee, HOD, Dept of Computer Science Women's Christian College, Nagercoil - 4.
Dr. A. John Christopher	-	Subject Expert Associate Professor, Dept. of Computer Science, S.T. Hindu College, Nagercoil-2.
Mrs. V. Mageshwari	-	Subject Expert, Head, Dept. of IT, Fatima College(Autonomous) Madurai-18.
Mrs. Asha William	-	Industrialist, Director Creative Technologies, Velachery, Chennai-42
Ms. S. Pamina	-	Alumni, UST Global Campus, Trivandrum, Kerala
Mrs. J. Anto Hepzie Bai	-	Member, Holy Cross College, Nagercoil
Ms. V. Abisha	-	Member, Holy Cross College, Nagercoil
Mrs. V. R. Bithiah Blessie	-	Member, Holy Cross College, Nagercoil
Mrs. PillaiArchana	-	Member, Holy Cross College, Nagercoil

Agenda

1. Prayer
2. Welcome by the Chairperson
3. Reading of the minutes of the previous meeting
4. Panel of Examiners for UG
5. Restructuring / Revision of curriculum for UG with PEOs, POs, PSOs and COs.
6. Revision of syllabus for UG Semester I and II
7. Classification of New Courses
8. Classification of courses as Employability / Entrepreneurship / Skill Development

9. Classification of courses as Local / National / Regional / Global
10. Classification of courses as Crosscutting Issues Gender Equity / Environment and Sustainability / Human Values / Professional Ethics
11. Question Paper pattern for internal and external examinations
12. Recommendation of books and journals for UG
13. Conduct of UG practical exam during the odd and even semester
14. Conduct of seminars / workshops in collaborations with Government Agents / Universities / NGOs.
15. Suggestion for innovative teaching and evaluation techniques for UG
16. Discussion on coordination of teaching, research, extension and other activities of the department
17. Feedback and action taken
18. Next meeting of BoS
19. Any other

The Board of Studies meeting commenced with a prayer by Mrs.V. R. Bithiah Blessie. The members of the board, the Chairperson, University Nominee, Subject experts, Industrialist, Alumna and faculty of the Department, were present for the meeting.

Chairperson's Address

The Chair Person and Head of the Department, Sr.Jothi Antony, welcomed the members and introduced them while briefing on the agenda for the conduct of this meeting. The following items in the Agenda were discussed by the members of the Board.

Item 01/BoS 20.01/03: Reading of the minutes of the previous meeting held on 05-02-2019.

Sr.Jothi Antony read the minutes and was approved by the members incorporating the modifications/ suggestions given by the Academic council.

Item 02/BoS 20.01/04: Approval of Panel of Examiners for UG

The lists of panel of examiners were approved by the BoS members. Names and contact details of the examiners were presented for approval.

Item 03/BoS 20.01/05: Approval of Restructuring/Revision of curriculum for UG with PEOs, POs, PSOs and COs

The Bos members approved the PEOs, POs, PSOs and COs after discussion for the courses in Sem I and Sem II for UG Programme.

Programme Educational Objectives (PEOs)

PEO -1	The graduates will apply appropriate theory and scientific knowledge to participate in activities that support humanity and economic development nationally and globally, developing as leaders in their fields of expertise.
PEO - 2	The graduates pursue lifelong learning and continuous improvement of the knowledge and skills with the highest professional and ethical standards.
PEO - 3	The graduates are trained to be employed in IT industries by providing domain knowledge, career and entrepreneurial skills.

Programme Outcomes (POs)

POs	Upon completion of B.Sc. Computer Science programme, the graduates will be able to:
PO - 1	utilize scientific knowledge to pursue higher studies in the relevant field.
PO - 2	create innovative ideas to enhance entrepreneurial skills for economic independence.
PO – 3	face challenging competitive examinations that offer rewarding careers.
PO – 4	reflect upon green initiatives and take responsible steps to build a sustainable environment.
PO – 5	handle ethical issues with social responsibility.
PO – 6	communicate effectively and collaborate successfully with peers to become competent professionals.

Programme Specific Outcomes (PSOs)

PSOs	Upon completion of the B.Sc. Degree Programme, the graduates will be able to:
PSO – 1	acquire the domain knowledge with critical thinking to serve the technical society as software engineer, data analyst and designing professional.
PSO - 2	enrich the managerial skills through team building and social responsibility.
PSO – 3	enhance the communication skills with lifelong learning.
PSO - 4	apply modern techniques to sustain the ever-changing era with values.

The overall structure of the curriculum framed in 2020 TANCHE was accepted by the board with the following modifications.

    i.   The core and Elective courses were changed.

Course Structure
Distribution of Hours and Credits

Course	Sem. I	Sem.II	Sem.III	Sem.IV	Sem.V	Sem.VI	Total Hours	Total Credits
Part I–Language	6 (4)	6 (4)	-	-	-	-	12	8
Part II-English	6 (4)	6 (4)	-	-	-	-	12	8
Part-III								
Major Core - Theory	4(4)	4(4)	5(4)+ 5(4)+ 5(4)	5(5) + 5(5)	6(5) + 5(5)	5(5)+ 5(5)+ 5(5)	59	55
Major Core -Practical	4(2)	4(2)	4(2) 4(2)	4(2) 4(2)	6(3)	4(2) 4(2)	38	19
Elective	-	-	-	5(4)	5(4)	5(4)	15	12
Project	-	-	-	-	6(6)		6	6
Allied- Theory	4(3)	4(3)	5(3)	5(3)	-	-	18	12
Part IV								
Add on Course (Professional English)	2(2)	2(2)	2 (2)	2 (2)	-	-	8	8
Non-Major Elective	2 (2)	2 (2)	-	-	-	-	4	4
SEC(Skill Enhancement Course)	2 (2)	2 (2)	-	-		2 (2)	6	6
AEC (Ability Enhancement Course)					2(2)		2	2
Total	30(23)	30(23)	30(21)	30(23)	30(25)	30(25)	180	140
Non Academic Courses								
Part V								
FC –I(Values for Life)	-	(1)	-	-	-	-	-	1
FC– II(Personality Development)	-	-	-	(1)	-	-	-	1
FC–III (Human Rights Education)	-	-	-	-	(1)	-	-	1
FC –IV (Gender Equity Studies)	-	-	-	-	-	(1)	-	1
SLP-Community	-	-	(2)	-	-	-	-	2

Engagement Course									
SLP-Extension activity (RUN)			-	(2)					2
STP - Clubs & Committees / NSS	-	-	-	(2)	-	-	-		2

Total number of hours   =   **180**

Total number of credits   =   **140+10**

Non Academic Courses are Mandatory and conducted outside the regular working hours

Courses offered for the students of **B.Sc. Computer Science** are given in the following structure

Semester	Part	Course Code	Course	Hours / Week	Credit
I	Part I	TL2011/ FL2011	Language: Tamil/French	6	4
	Part II	GE2011	General English	6	4
	Part III	SC2011	Major Core I: Programming Concepts in C	4	4
		SC20P1	Major Practical I: C Programming	4	2
		SA2011	Allied I: Theory: Digital Principles and Applications	4	3
	Part IV	SEC201 / SEC202	Skill Enhancement Course (SEC): Yoga / Computer Literacy	2	2
		SNM201	Non Major Elective Course(NMEC): Internet and Web Designing with HTML	4	2
		VEC202	Foundation Course I: Values for Life	-	-
	Part V	SDP202	Skill Development Programme (SDP) : Certificate Course	-	-
		STP204	Student Training Programme (STP) : Clubs & Committees / NSS	-	-
II	Part I	TL2021/ FL2021	Language: Tamil/French	6	4
	Part II	GE2021	General English	6	4
	Part III	SC2021	Major Core II: Programming using C++	4	4
		SC20P2	Major Practical II: C++ Programming	4	2
		SA2021	Allied II: Theory: Discrete Mathematics	4	3
		SEC201 / SEC202	Skill Enhancement Course (SEC): Yoga / Computer Literacy	2	2

	Part IV	SNM202	Non Major Elective Course (NMEC): Desktop Publishing using Scribus	4	2
		VEC202	Foundation Course I: Values for Life	-	1
	Part V	SDP202	Skill Development Programme (SDP): Certificate Course	-	1
		CEC202	Community Engagement Course	-	1
		STP204	Student Training Programme (STP): Clubs & Committees / NSS	-	-
III	**Part III**	SC2031	Major Core III: Programming in Java	5	4
		SC2032	Major Core IV: Data Structure Using C++	5	4
		SC2033	Major Core V: Computer Networks	5	4
		SC20P3	Major Practical III: Java Programming	4	2
		SC20P4	Major Practical IV: Data Structure Using C++	4	2
		SA2031	Allied III: Theory: Numerical and Statistical Methods	5	3
	Part IV	AEC203	Ability Enhancement Compulsory Course (AECC) : English for Communication	2	2
		VEC204	Foundation Course II: Personality Development	-	-
	Part V	STP204	Student Training Programme (STP): Clubs & Committees / NSS	-	-
		CEC202	Community Engagement Course		1
IV	**Part III**	SC2041	Major Core VI: UNIX and Shell Programming	5	5
		SC2042	Major Core VII: Relational Database Management Systems	5	5
		SC2043 SC2044 SC2045	Elective I: (a) Multimedia Systems (b) Microprocessor & Assembly Language Programming (c) Open Source Technology	5	4
		SC20P5	Major Practical V: Shell Programming	4	2
		SC20P6	Major Practical VI: SQL and PLSQL	4	2
		SA2041	Allied IV: Theory: Mobile Computing	5	3
	Part IV	AEC204	Ability Enhancement Compulsory Course (AECC): Environmental Studies	2	2
		VEC204	Foundation Course II: Personality Development	-	1

		SLP203	Service Learning Programme (SLP): Extension Activity (RUN)	-	1
	Part V	STP204	Student Training Programme (STP): Clubs & Committees / NSS	-	1
V	Part III	SC2051	Major Core VIII: Web Technology	6	5
		SC2052	Major Core IX: Software Engineering	5	5
		SC2053 SC2054 SC2055	Elective II: (a)Data Mining and Warehousing (b) System Administration and Maintenance (c) Software Testing	5	4
		SC20P7	Major Practical VII: Web Technology Lab	6	3
		SC20PR	Project	6	6
	Part IV	SSK205	Skill Enhancement Course (*SEC): PHP Programming	2	2
		HRE205	Foundation Course III: Human Rights Education (HRE)	-	1
VI	Part III	SC2061	Major Core X: Programming in Python	5	5
		SC2062	Major Core XI: Computer Graphics	5	5
		SC2063	Major Core XII: Operating System	5	5
		SC2064 SC2065 SC2066	Elective III: (a) IOT (b) Network Security (c) E-Commerce Technologies	5	4
		SC20P8	Major Practical VIII: Python Programming	4	2
		SC20P9	Major Practical IX: Computer Graphics	4	2
	Part IV	SSK206	Skill Enhancement Course (*SEC): Digital Marketing	2	2
		GES206	Foundation Course IV: Gender Equity Studies (GES)	-	1
			TOTAL	180	140+5

Value Added Courses

Semester	Course Code	Title of the course	Total hours
I	VASC201	DCA - I (Photoshop)	30
II	VASC202	DCA - II (Programming Essentials in Python)	30

Item 04/ BoS 20.01/06: Approval of Revision of Syllabus for UG Semester I and II

The BoS members approved the courses in Semester I and Semester II for UG Programme. The following courses during the I and II semesters are revised/modified based on the feedback from the students & Alumni.

Sl.No.	Semester	Paper Code	Paper Title	Changes	
				Removed (if any)	Addition (if any)
1	I	SC2011	Major Core I: Programming Concepts in C	Increment and Decrement Operators, Special Operators removed from Unit I. String Handling Functions from Unit III and Arrays of Structures from Unit IV is removed.	Library Functions added in Unit I. Storage Classes, Automatic, External, Static, Register Variables, Multi-file programs added in Unit III.
2	II	SC2021	Major Core II: Object Oriented Programming Using C++	-	Parameterized Constructors, Copy Constructors added in Unit II and Pure Virtual Functions in Unit III. Exception Handling, Standard template Library added in Unit V.

ii) The title of the core paper in Semester I 'Programming in C' is changed into 'Programming Concepts in C'.

iii) The Allied paper in Semester I 'Digital Computer Fundamentals' is removed and the course 'Digital Principles and Applications' is introduced.

iv) Instead of the Non Major Elective Course 'CorelDraw' in Semester I, the paper 'Internet and Web Designing with HTML' is introduced.

v) The Allied paper 'PC Hardware and Troubleshooting' in Semester II is removed and the course 'Computer Organization and Architecture' is introduced.

vi) Instead of the Non Major Elective Course 'Internet and its Applications' in Semester II the paper 'Desktop Publishing using Scribus' is introduced.

Item 05/BoS 20.01/07: Classification of New Courses

Sl. No	Semester	Course Code	Course Title	New Courses
1.	I	SC2011	Major Core I: Programming Concepts in C	
2.	I	SC20P1	Major Practical I: C Programming	
3.	I	SA2011	Allied I: Theory: Digital Principles and Applications	✓
4.	I	SNM201	Non Major Elective (NME): Internet and Web Designing with HTML	✓
5.	II	SC2021	Major Core II: Object Oriented Programming C++	
6.	II	SC20P2	Major Practical II: C++ Programming	
7.	II	SA2021	Allied II: Theory: Computer Organization and Architecture	✓
8.	II	SNM202	Non Major Elective Course (NMEC): Desktop Publishing using Scribus	✓
9.	II	SEC202	SEC: Computer Literacy	

Item 06/BoS 20.01/08: Classification of the courses as Employability/ Entrepreneurship / Skill Development

Sl.No	Semester	Course Code	Course Title	Employ ability	Entre prene urship	Skill Develo pment
1.	I	SC2011	Major Core I: Programming Concepts in C	✓		✓
2.	I	SC20P1	Major Practical I: C Programming	✓		✓
3.	I	SA2011	Allied I: Theory: Digital Principles and Applications	✓	✓	✓
4.	I	SNM201	Non Major Elective (NME): Internet and Web Designing with HTML	✓	✓	✓
5.	II	SC2021	Major Core II: Object Oriented Programming C++	✓		✓
6.	II	SC20P2	Major Practical II: C++ Programming	✓		✓
7.	II	SA2021	Allied II: Theory: Computer Organization and Architecture	✓	✓	✓
8.	II	SNM202	Non Major Elective Course (NMEC): Desktop Publishing using Scribus	✓	✓	✓
9.	II	SEC202	SEC: Computer Literacy	✓		

Item 07/BoS 20.01/09: Classification of the courses as Local/ National / Regional / Global

Sl. No	Semester	Course Code	Course Title	Local	National	Regional	Global
1.	I	SC2011	Major Core I: Programming Concepts in C				✓
2.	I	SC20P1	Major Practical I: C Programming				✓
3.	I	SA2011	Allied I: Theory: Digital Principles and Applications	✓	✓	✓	✓
4.	I	SNM201	Non Major Elective (NME): Internet and Web Designing with HTML	✓	✓	✓	✓
5.	II	SC2021	Major Core II: Object Oriented Programming C++				✓
6.	II	SC20P2	Major Practical II: C++ Programming				✓
7.	II	SA2021	Allied II: Theory: Computer Organization and Architecture	✓	✓		✓
8.	II	SNM202	Non Major Elective Course (NMEC): Desktop Publishing using Scribus		✓	✓	✓
9.	II	SEC202	SEC: Computer Literacy	✓	✓		✓

Item 08/BoS 20.01/10: Classification of courses as Crosscutting Issues Gender Equity / Environment and Sustainability / Human Values / Professional Ethics

No Courses were classified as Crosscutting Issues - Gender Equity / Environment and Sustainability / Human Values / Professional Ethics

Item 09/BoS 20.01/11: Question Paper pattern for internal and external examinations

Internal: External 30:70

Internal: 30   Periodical test :   15 marks

Quiz (2)   :   4 marks

Class test   :   6 marks

Class assignment   :   5 marks

External: 70

Part A – 10x1=10 marks (Objective type)

Part B- 5x 4=20 marks (Internal Choice)

Part C- 5x8=40 marks (Internal Choice)

The question pattern is not applicable for the following papers: 1) NMEC   2) SEC

Item 10/BoS 20.01/12: Recommendation of books and journals for UG

Board suggests to use the text books and reference books given in the TANSCHE structure for UG programme.

Item 11/BoS 20.01/13: Conduct of UG practical exam during the odd and even semester

From the feedback of the stakeholders, it is suggested by the Board of studies members to retain the existing pattern followed from 2007 onwards. (Practical exams are conducted in all the semesters)

Item 12/BoS 20.01/14: Conduct of seminars/ workshops in collaboration with Government Agents / Universities / NGOs

- ❖ Workshops (Based on Corporate Sectors) in collaboration with Creative Technologies, Chennai.
  - ▪ I year – Planning
  - ▪ II year – Decision Making
- ❖ Value Added Course for II year (Corporate Communication) in collaboration with Creative Technologies, Chennai.

Item 13/BoS 20.01/15: Suggestion for innovative teaching and evaluation techniques for UG

The BoS members suggested the following methodologies to enhance teaching, learning and evaluation.

i. Use of the participative learning techniques like Blended Class room, Peer teaching, Flip Class, Group discussion, case study.

ii. Internal evaluation based on class room assessments such as Quizzes, Kahoot, Moodle

Item 14/BoS 20.01/16: Discussion on coordination of teaching, research, extension and other activities of the department

New Measures:

- ❖ 10 days training on Corporate Skill Development Programme for outgoing students in collaboration with Creative Technologies, Nagercoil.
- ❖ 10 days training on Mobile App Development for I year students in collaboration with Kovai Consultancy services, Coimbatore

Item 15/BoS 20.01/17: Feedback and Action Taken

Stakeholders	Feedback Received	Action Taken
Students	Reduce the syllabus	Implemented
Parents	Add special training programme	Hardware training were given
Teachers	Satisfied with teaching	-
Alumni	Curriculum is good	-
Academic Peers	Appreciated the syllabus	-

Feedback from student representatives

Update the syllabus with current trend technologies. Prepare curriculum in such a way that it is a mix of theory and practical oriented. Give out of classroom learning opportunities like attending seminars, workshop and competitions.

Princy Jonisha *Princy Jonisha*

Jenifer *Jenifer*

Item 16/BoS 20.01/18: Next Meeting of BoS

The members of the board suggested having the next meeting of BoS in August 2nd week, 2020.

Item 17/BoS 20.01/19: Any other

Nil

Details of Board Members with their Signature

Name of the Members	Designation	Signature
Sr.Jothi Antony	Assistant Professor and Head	
Dr. D. Glory Ratna Mary	Associate Professor and Head	
Dr.A. John Christopher	Associate Professor	
Mrs. V. Mageshwari	Associate Professor and Head	
Mrs. Asha William	Director, Creative Technologies Velachery	
Ms. S. Pamina	Software Tester(Alumni)	
\Mrs. J. Anto Hepzie Bai	Assistant Professor	
Mrs. V. Abisha	Assistant Professor	
Mrs. V.R. Bithiah Blessie	Assistant Professor	
Mrs. PillaiArchana	Assistant Professor	