

**MEENAKSHI ACADEMY OF HIGHER EDUCATION  
AND RESEARCH**

**(Deemed To Be University U/S 3 OF UGC ACT, 1956), CHENNAI.  
12, Vembuliamman Koil Street, West K.K. Nagar, Chennai – 600 078**

**FACULTY OF HUMANITIES AND SCIENCE  
DEPARTMENT OF COMPUTER APPLICATIONS**



**REGULATIONS AND SYLLABUS  
(REGULATIONS – 2018)**

**Effective from the Academic Year 2018 – 2019**

*V. Senthil*

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078.

# MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH

REGULATIONS -2018


## Vision

- To be a world-class institution, transforming society through value-based diverse programs and healthcare advancements, leading to the all-around development of human resources, knowledge, innovation, entrepreneurship, and research.

## Mission

- To become an institute of eminence by developing world-class professionals in the field of healthcare, science, liberal arts, technology and research with a focus on the societal good.
- To create an enabling state-of-the-art infrastructure, intellectual capital and provide best-in-class learning experience with a freedom to innovate and invent.
- To foster values and ethics so as to develop students and learners into responsible citizens of the Nation and the world.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembullaanman Koil Street,  
West K.K. Nagar, Chennai-600 078

# MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH

FACULTY OF HUMANITIES AND SCIENCE  
REGULATIONS -2018

## VISION

- Provide quality education which would make learning effective and expand the frontiers of knowledge to serve the society

## MISSION

- To be a world class institution committed to develop individuals to meet global challenges.
- To instil a sense of confidence and leadership qualities in the minds of students for the wholesome personality development



*V. S. Kanth*  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078.

## LIST OF PROGRAMS:

### STREAMS IN ARTS

- B.A (Bachelor in English)
- B. Com (Bachelor in Commerce)
- B. Com (CA) (Bachelor in Commerce with Computer Applications)
- B. Com (CS) (Bachelor in Commerce with Corporate Secretary ship)

### STREAMS IN SCIENCE

- B.C.A (Bachelor in Computer Applications)
- B.Sc. (Bachelor in Computer Science)
- B.Sc. (Bachelor in Mathematics)
- B.Sc. (Bachelor in Visual Communication)

### STREAMS IN PROFESSIONAL PROGRAM

- B.B.A (Bachelor in Business Administration)



*Mr. S. S. S. S.*  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembulamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**

**FACULTY OF HUMANITIES AND SCIENCE**

**REVISED REGULATIONS -2018**

In exercise of the powers conferred by the Board of Management, Meenakshi Academy of Higher Education and Research, Chennai here by makes the following Regulations:

**1. SHORT TITLE**

These Regulations shall be called “THE REGULATIONS FOR B.A., B.Sc., B.C.A., B.Com., AND B.B.A DEGREE PROGRAMS UNDER FACULTY OF HUMANITIES AND SCIENCE OF MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH”.

**2. COMMENCEMENT**

They shall come into force from the academic year 2018 –2019 onwards.

The Revised Regulations and the Syllabus are subject to modification by the Standing Academic Council of MAHER from time to time.


**3. TITLE OF THE PROGRAM**

It shall be called as Bachelor of Arts (English), Bachelor of Science (Computer Science / Mathematics / Visual Communication), Bachelor of Computer Applications, Bachelor of Commerce (General / Computer Applications / Corporate Secretaryship) and Bachelor of Business Administration.

**4. ELIGIBILITY FOR ADMISSION**

Candidates should have passed in the Higher Secondary Examination (Academic or Vocational Stream) conducted by the Government of Tamil Nadu or an examination accepted as equivalent thereof by the Academic Council of MAHER and the subjects specified below:



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078.

**For all B.A., B.Sc., B.C.A., B.Com and B.B.A Degree Programs - Under**

**Faculty of Humanities and Science**

S.No.	Program and Branch	Major Subjects Of Study In HSE (+2)
1	B.A English	A Pass in the Higher Secondary Examinations (Academic or Vocational Stream)
2	B.Sc Mathematics	Mathematics or Statistics or Business Mathematics
3	B.Sc Visual Communication	A Pass in the Higher Secondary Examinations (Academic or Vocational Stream)
4	B.Sc Computer Science	Computer Science or Mathematics or Statistics or Business Mathematics
5	B.C.A	Computer Science or Mathematics or Statistics or Business Mathematics
6	B.Com (General)	Accountancy and Commerce
7	B.Com (Computer Applications)	Accountancy, Commerce and Computer Science



*Mr. Senthil*

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliammon Koll Street,  
West K.K. Nagar, Chennai-600 078.

8	B.Com (Corporate Secretaryship)	Accountancy and Commerce
9	B.B.A	A Pass in the Higher Secondary Examinations (Academic or Vocational Stream)

## 5. CRITERIA FOR SELECTION

Students for all Degree Programs shall be admitted based on performance at the Qualifying Examination conducted by the Government of Tamil Nadu or an examination accepted as equivalent thereof by the Academic Council of MAHER.

## 6. AGE LIMIT FOR ADMISSION

Candidate should have completed the age of 17 years at the time of admission or would complete the age of 17 years on or before 31st December of the year of admission to the first year Degree Program.

## 7. ELIGIBILITY CERTIFICATE

No candidate from other states shall be admitted to the Degree Program unless the candidate has obtained and produced Eligibility Certificate issued by this University. The candidate has to make an application to MAHER with the Original and Xerox copies of the following documents along with the prescribed fee.

- 1) Higher Secondary or equivalent Examination Mark Sheet and
- 2) Transfer Certificate Candidate should obtain Eligibility Certificate before the last date for admission as notified by MAHER.



*V. S. Senthil*  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

## 8. REGISTRATION

A candidate admitted to the Degree Program of MAHER shall register by remitting the prescribed fees along with the application form for registration duly filled in and forwarded to this MAHER through the Head of the Institution within the stipulated date.

## 9. DURATION OF THE PROGRAM

The Duration of the program is for a period of three years (Six semesters). Each academic year shall comprise of two semester's viz. Odd and Even semesters. Odd semesters shall be from June / July to October / November and Even Semesters shall be from November / December to April / May. There shall be not less than 90 working days for each semester (Exclusive of the days for the conduct of University end-semester examinations).


## 10. CUT OFF DATES FOR ADMISSION TO EXAMINATIONS

The candidates admitted from 1st June to 31st July of the academic year be registered to take up their of November of the academic year. There will not be any admission after 31st July for the academic year.

## 11. CREDIT REQUIRMENTS AND ELIGIBILITY FOR AWARD OF DEGREE

A candidate shall be eligible for the award of the Degree only if he/she has undergone the prescribed course of study under the Faculty of Humanities and Science of MAHER for a period of not less than three academic years and passed the examinations of all the Six Semesters prescribed earning a minimum of 140 credits as per the distribution given in Regulation 12 for Part I, II, III, IV & V and also fulfilled such other conditions as have been prescribed thereof.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Vembulamban Koil Street,  
West K.K. Nagar, Chennai-600 078.



**12. PROGRAM OF STUDY, CREDITS AND SCHEME OF EXAMINATION.**

12.1 The Program Components and Credit Distribution shall consist of the following: (Minimum Number of Credits to be obtained)

<b>Program Component</b>	<b>Name of the Course</b>	<b>Credits allotted for Four Semester Language Papers (B.A &amp; B.Sc Courses)</b>	<b>Credits allotted for Two Semester Language Paper (B.Com, B.B.A &amp; B.C.A Courses)</b>
<b>PART I</b>	Tamil or Other Languages	12	6
<b>PART II</b>	English	12	6
<b>PART III</b>	Core Courses	60	76
	Allied Courses	20	16
	Project/ Three Elective Courses	15	15
<b>PART IV</b>	i. Basic Tamil/ Advanced Tamil/ NME (Non Major Elective)	4	4
	ii. Soft Skill Courses	12	12
	iii. Environmental Studies	2	2
	iv. Value Education	2	2
<b>PART V</b>	Extension Activities	1	1
<b>Total Credits</b>		<b>140</b>	<b>140</b>



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

## 12.2 DETAILS OF PROGRAM OF STUDY OF PARTS I – V

12.2.1 **PART I:** Tamil: According to the syllabus and text-books prescribed from time to time

12.2.2 **PART II:** English: According to the syllabus and text-books prescribed from time to time

12.2.3 **PART III :** Core, Allied and Project/Three Elective Courses: As prescribed by the Board of Studies.

12.2.4 **PART IV:** I Non Major Elective (NME). II. Soft Skill Courses. III. Environmental Studies. IV. Value Education

12.2.5 **PART V:** Extension Activities: Students shall be awarded a maximum of 1 Credit for Compulsory Extension Service. All the Students shall have to enroll for NSS /NCC/ NSO (Sports & Games) Rotract/ Youth Red Cross or any other Service Organizations in the Faculty of Humanities and Science and shall have to put in compulsory minimum attendance of 40 hours which shall be duly certified by the Principal of the Faculty of Humanities and Science before 31st March in a year. If a student lacks 40 hours attendance in the first year, he or she shall have to compensate the same during the subsequent years. Those students who complete minimum attendance of 40 hours in one year will get 'half-a-credit and those who complete the attendance of 80 or more hours in Two Years will get 'one credit'. Literacy and Population Education and Field Work shall be compulsory components in the above extension service activities.

12.2.6 Scheme of Examinations and syllabus of each programme given separately in Annexure –I



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembalathimathal East Street,  
West K.K. Nagar, Chennai-600 078.

### 13 INSTRUCTIONAL (TEACHING) HOURS

13.1 For First, Second, Third and Fourth semesters:

Course	BA, BBA and B. Com	B. Sc without Practical	B. Sc and BCA with Practical
Language	4+2hours*	4+2hours*	4+2hours*
English	4+2hours@	4+2hours@	4+2hours@
Core course I	5 hours	5 hours	5 hours Theory 3 hours Practical
Core course II	5 hours	5 hours	-
Allied course	6 hours	6 hours	5 hours Theory 3 hours Practical
Non-Major Elective Course	2 hours	2 hours	2 hours
<b>Total</b>	<b>30 hours</b>	<b>30 hours</b>	<b>30 hours</b>

\*2 hours for Part IV Environmental Studies/ Value Education

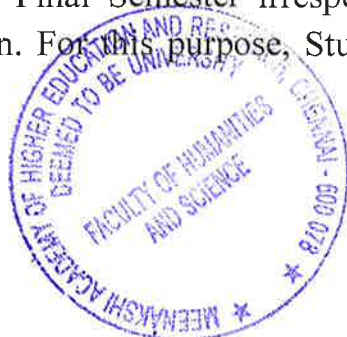
@2 hours for Soft Skills Courses.


13.2 For Fifth and Six Semesters:

Program	BA,BBAandB.Com	B.Scand BCA
CoreCourse(each)	6hours	6hours
ElectiveCourse(each)	5hours	5hours

### 14. EXAMINATION AND EVALUATION

14.1 Register for all subjects: Students shall be permitted to proceed from the First Semester up to Final Semester irrespective of their failure in any of the Semester Examination. For this purpose, Students shall register for all the arrear



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Venkatasubraman Koil Street,  
West K.K. Nagar, Chennai-600 078

subjects of earlier semesters along with the current (subsequent) Semester Subjects.

#### 14.2 Marks for Internal and End Semester Examinations for PART I, II, III, and IV

Category	Theory	Practical
Internal Assessment	25	40
End-Semester (University) Examination	75	60

#### 14.3 Procedure for Awarding Internal Marks


Course	Particulars	Marks
	<b>Tests (2 out of 3)</b>	<b>10</b>
<b>Theory Papers</b>	Attendance	5
	Seminars	5
	Assignments	5
	Total	25
	Attendance	5
<b>Practical Papers</b>	Test best 2 out of 3	30
	Record	5
	Total	40
	Internal Marks (best 2 out of 3 presentations)	20
<b>Project</b>	Viva-Voce	20
	Project Report	60
	<b>Total</b>	<b>100</b>

#### 14.4 (i) Awarding Marks for Attendance (out of 5)

Attendance below 60% = 0 marks, 61 % to 75% = 3 marks,

76 % to 90% = 4 marks and above 91%= 5 marks



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembulamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

(ii) Conducting Practical and Project Viva-voce Examination: By Internal and External Examiners

#### 14.5. Question Paper Pattern for End Semester (University) Examination

##### SECTION – A

(30 words) 10 questions out of 12 questions

10 X 2 marks = 20 marks

##### SECTION – B

(200 words) 5 questions out of 7 questions

5 X 5 marks = 25 marks

##### SECTION – C

(500 words) 3 questions out of 5 questions

3 X 10 marks = 30 marks


TOTAL = 75 marks

#### 14.6. PASSING MINIMUM

14.6.1 The passing minimum for Internal Assessment shall be 40% out of 25 Marks (i.e. 10 Marks). Failed candidates in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent semesters (2 chances will be given) by writing tests and by submitting Assignments.

14.6.2 For external examination, passing minimum shall be 40% [Forty Percentage] of the maximum marks prescribed for the paper for each Paper / Practical / Project and Viva-Voce.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEEHARKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vambubaramin Kor Street,  
West K.K. Nagar, Chennai-600 078.

14.6.3 In the aggregate [External/Internal] the passing minimum shall be of 40%.

14.6.4. He/She shall be declared to have passed the whole examination, if he/she passes in all the papers and practical wherever prescribed as per the scheme of the examinations by earning 140 CREDITS in Part I, II, III, IV & V. He/she shall also fulfill the extension activities prescribed earning a minimum of 1 credit to qualify for the Degree.

#### 14.7. RETOTALLING OF THE ANSWER SCRIPTS:

There shall be no revaluation of for UG Students. However, all UG Students who appeared for their Semester Examinations are eligible for applying for re totalling of their answer scripts.

#### 15. CONDONATION

15.1. Students must have 75% of attendance in each course for appearing the examination.

15.2. Students who have 74% to 70% of attendance shall apply for Condonation in the prescribed form with the prescribed fee of Rs.500/- (Rupees Five Hundred only).

15.3. Students who have 69% to 60% of attendance shall apply for Condonation in prescribed form with prescribed fee of Rs.500/- (Rupees Five Hundred only) along with the Medical Certificate.

15.4. Students who have below 60% of attendance are not eligible to appear for the examination. They shall re-do the semester(s) after completion of the programme.



PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEEHAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Venbulasamman Koil Street,  
West K.K. Nagar, Chennai-600 078.

## 16. CLASSIFICATION OF SUCCESSFUL STUDENTS

16.1. PART I TAMIL / OTHER LANGUAGES;

PART II ENGLISH AND

PART III CORE SUBJECTS, ALLIED, ELECTIVES COURSES AND PROJECT;

16.1.1 For each of the three parts, there shall be separate classification on the basis of CGPA as indicated in regulation 18.2.


16.1.2 A successful candidate who secures 75% and above of the marks in his / her first appearance in all the subjects in Part III within the prescribed period will be declared to have passed in first class with Distinction.

16.1.3 Successful Students passing the Examinations for the Part I, Part II and Part III courses and securing the marks (a) 60 percent and above and (b) 50 percent and above but below 60 percent in the aggregate shall be declared to have passed the examination in the FIRST and SECOND class respectively; all other successful candidates shall be declared to have passed the examination in the THIRD Class.

17. **MARKS AND GRADES:** The following table shows the marks, grade points and letter grades to indicate the performance of the Student:

MARKS	GRADEPOINTS	LETTERGRADE
96 and above	10	S+
90- 95	9.5	S
86-90	9	D++
81-85	8.5	D+
76-80	8	D
71-75	7.5	A++



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembulammann Kall Street,  
West K.K. Nagar, Chennai-600 078.

66-70	7	A+
61-65	6.5	A
56-60	6	B+
51-55	5.5	B
46-50	5	C+
40-45	4.5	C
Below 40	0	F

### 18.1. Computation of Grade Point Average (GPA) in a Semester, Cumulative Grade Point Average (CGPA) and Classification

GPA for a Semester: =  $\frac{\sum i C_i G_i}{\sum i C_i}$

That is, GPA is the sum of the multiplication of grade points by the credits of the courses divided by the sum of the credits of the courses in a semester.

CGPA for the entire programme: =  $\frac{\sum n \sum i C_{ni} G_{ni}}{\sum n \sum i C_{ni}}$

That is, CGPA is the sum of the multiplication of grade points by the credits of the entire programme divided by the sum of the credits of the courses of the entire programme Where,

$C_i$  = Credits earned for course  $i$  in any semester,

$G_i$  = Grade Points obtained for course  $i$  in any semester

$n_i$  = Semester in which such courses were credited.

### 18.2. Letter Grade and Class

CGPA	GRADE	CLASSIFICATION OF FINAL RESULT
------	-------	--------------------------------



*VB*

PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078



9.51 and above	S+	First Class Exemplary *
9.01-9.50	S	
8.51-9.00	D++	
8.01-8.50	D+	First Class with Distinction *
7.51-8.00	D	
7.01-7.50	A++	
6.51-7.00	A+	First Class
6.01-6.50	A	
5.51-6.00	B+	
5.01-5.50	B	Second Class
4.51-5.00	C+	Third Class
4.00 - 4.50	C	
Below 4.00	F	Fail

\*The Students who have passed in the first appearance and within the prescribed semester of the UG Programme (Major, Allied and Elective courses only) are eligible.


## 19. RANKING

Students who pass all the examinations prescribed for the Program in the FIRST APPEARANCE ITSELF ALONE are eligible for Ranking / Distinction.

## 20. RE-ADMISSION AFTER BREAK OF STUDY

a) The calculation of the break of study of the candidate for readmission shall calculate from the date of first discontinuance of the Course instead of from the date of admission.



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

- b) Candidates having break of study shall be considered for re admission provided, they are not subjected to any disciplinary action and no charges pending or contemplated against them.
- c) All readmissions of candidates are subject to the approval of the Vice-Chancellor.
- d) A candidate having a break of study upto 3 years from the date of discontinuation shall apply for the readmission for condonation to the Academic Officer of this University. The candidates may be readmitted in the corresponding course of study. The candidate has to fulfill the attendance requirements of the University and shall be granted exemption in the subjects he/she has already passed.
- e) Candidates having a break of study of 4 years and above from the date of discontinuance and more than two spells of break will not be considered for readmission.

## **21. MAXIMUM PERIOD FOR COMPLETION OF THE PROGRAMS TO QUALIFY FOR A DEGREE**

**21.1** The candidate has to successfully complete the program in 6 years i.e., double the duration of the program from the date of joining.

**21.2** Students qualifying during the extended period (after normal period of 3 years), shall not be eligible for RANKING.

## **22. Grievance Redressal Committee**

The College shall form a Grievance Redressal Committee for each course in each department with the Course Teacher and the HOD as the members. This



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliammar Kod Street,  
West K.K. Nagar, Chennai-600 078


Committee shall solve all grievances relating to the Internal Assessment marks of the students.

### SUMMARY OF CREDIT ALLOCATION

Course Component	Name of the Course	Credits allotted for Four Semester Language Papers (B.A & B.Sc Courses)
PART I	Tamil or Other Languages	12
PART II	English	12
PART III	Core Courses	60
	Allied Courses	20
	Project/ Three Elective Courses	15
PART IV	i. Basic Tamil/ Advanced Tamil/ NME (Non Major Elective)	4
	ii. Soft Skill Courses	12
	iii. Environmental Studies	2
	iv. Value Education	2
PART V	Extension Activities	1
	<b>Total Credits</b>	<b>140</b>

Course Component	Name of the Course	Credits allotted for Two Semester Language Paper (B.Com, B.B.A & B.C.A Courses)
PART I	Tamil or Other Languages	6
PART II	English	6
PART III	Core Courses	76
	Allied Courses	16
	Project/ Three Elective Courses	15
PART IV	i. Basic Tamil/ Advanced Tamil/ NME (Non Major Elective)	4
	ii. Soft Skill Courses	12
	iii. Environmental Studies	2
	iv. Value Education	2
PART V	Extension Activities	1
	<b>Total Credits</b>	<b>140</b>



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Meenakshinagar, Koval Street,  
 West K.K. Nagar, Chennai-600 078

**PROGRAM AND PROGRAM SPECIFIC OUTCOME**  
**PROGRAMS BACHELOR OF COMPUTER APPLICATIONS**

**PROGRAM OUTCOMES**

**PO1:** Able to understand the basic concepts of Programming language.

**PO2:** Able to understand the combination and sequential circuits and successfully applied in embedded fields

**PO3:** Able to identify data types, algorithms and understand to apply in integrated development environment to write, compile and test simple object oriented programs.

**PO4:** Understanding the concept of stacks, queues and basic operation of doubly linked list.

**PO5:** Understanding Memory management and optimization techniques for the improvement of system performance.

**PROGRAM SPECIFIC OUTCOME**

**PSO1:** To focus on preparing student for roles pertaining to computer applications and IT industry.

**PSO2:** To start from the basics and in every semester the student will learn each and everything about computers.

**PSO3:** To develop programming skills, networking skills; learn applications, packages, programming languages and modern techniques of Information Technology.




*V. Senthil*  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEEHAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**SEMESTER I**

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks	
			Code	Title	L	T	P		CI	External		
I	I	Language Course - I (LC); Tamil	LT 2101	Tamil - I	3	0	0	3	25	75	100	
	II	English Language Course - I (ELC); English	LE 2102	English I	3	0	0	3	25	75	100	
	II I		Core Course CC - I	CA2 101	Fundamentals of Digital Computers	3	1	0	4	25	75	100
			Core Practical(CP)-I	CA2 102	PC Software Lab	0	1	3	4	40	75	100
			Allied Course AC - I	AM 2701	Mathematics-I	3	1	0	4	25	75	100
	I V		Non Major Elective - I		Non Major Elective - I	2	0	0	2	25	75	100
			Career Development Course - I	CD 2801	Soft Skills - I; Essentials of Language and Communication	2	0	1	3	40	60	100
	Total								23			700



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

## SEMESTER II

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CI A	External	
II	I	Language Course - II (LC); Tamil	LT 2201	Tamil - II	3	0	0	3	25	75	100
	II	English Language Course - II (ELC); English	LE 2202	English II	3	0	0	3	25	75	100
	III	Core Course CC - II	CA2201	Programming in C	3	1	0	4	25	75	100
		Core Practical(CP)-I	CA2202	Programming in C Lab	0	1	3	4	40	75	100
		Allied Course AC - II	AM2704	Mathematics -II	3	1	0	4	25	75	100
	IV	Non Major Elective - II		Non Major Elective - II	0	0	2	2	25	75	100
		Career Development Course - II	CD 2802	Soft Skills - II; Essentials of Language and Communication	2	0	1	3	40	60	100
	Total								23		




*V. Senthil*

PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembulianman Koil Street,  
 West K.K. Nagar, Chennai-600 078

### SEMESTER III

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks	
			Code	Title	L	T	P		CI	External		
III	I	Core Course CC - III	LT 2101	Programming in C++ and Data Structures	3	1	0	4	25	75	100	
		Core Course(CC) - IV	EC2 619	Microprocessors and its Applications	3	1	0	4	25	75	100	
		Core Course(CC) - V	MA 2568	Numerical and Statistical Methods	3	1	0	4	25	75	100	
	II	Core Practical(CP)-III	CS2 453	Programming in C++ using Data structures	0	1	3	4	25	75	100	
		Allied Course(AC) - III	CO2 114	Financial Accounting	3	1	0	4	25	75	100	
		Career Development Course - III	ES2 981	Environmental Studies	0	0	2	2	25	75	100	
	I	V	Career Development Course - IV	CD2 803	Soft Skills - III : Personality Enrichment	2	0	1	3	40	60	100
			Total					25			700	




  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembulianman Koil Street,  
 West K.K. Nagar, Chennai-600 078

**SEMESTER IV**

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks	
			Code	Title	L	T	P		CI A	External		
IV	II	Core Course(C C) - VI	CS2403	Programming in Java	3	1	0	4	25	75	100	
	II	Core Course(C C) - VII	CS2404	Operating System	3	1	0	4	25	75	100	
	III		Core Course(C C) - VIII	CS2405	Computer Graphics	3	1	0	4	25	75	100
			Core Practical(CP)-IV	CS2454	Java Programming Lab	0	1	3	4	40	75	100
			Allied Course(A C) - IV	CO2119	Cost and Management Accounting	3	1	0	4	25	75	100
			Career Development Course - V	VE2001	Value Education	0	0	2	2	25	75	100
		Career Development Course - VI	CD2891	Soft Skills - IV: Quantitative Aptitude	2	1	0	3	40	60	100	
	<b>Total</b>								<b>25</b>			<b>700</b>



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENARSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Venbulingan Koil Street,  
 West K.K. Nagar, Chennai-600 078



**SEMESTER V**

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks	
			Code	Title	L	T	P		CI A	External		
V	III	Core Course (CC) - IX	CS2406	Database Management Systems	3	1	0	4	25	75	100	
		Core Course(C C) -X	MA2577	Software Engineering	3	1	0	4	25	75	100	
		Core Course(C C) -XI	MA2577	Resource Management Techniques	3	1	0	3	25	75	100	
		Core Practical(CP) -V	CS2455	RDBMS Lab	0	1	3	4	40	75	100	
		Core Elective(CE) -I		Visual Programming		3	1	0	4	25	75	100
				RDBMS & ORACLE								
				UNIX Programming								
Total								19			500	




*V. Senthil*  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

## SEMESTER VI

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CI A	External	
VI		Core Course(C C) - XII	CS2412	Web Technology	3	1	0	4	25	75	100
		Core Course(C C) - XIII	CS2413	Data Communication and Networking	3	1	0	4	25	75	100
		Core Course(C C) -XIV	CS2414	Software Testing	3	1	0	4	25	75	100
		Core Practical(CP) - VI	CS2456	Web Application Lab	0	1	3	4	40	75	100
		Core Elective(CE) -I	CS2415	Data Mining	3	1	0	4	25	75	100
				E-Commerce							
				Objected Oriented Analysis & Design							
		Core Elective(CE) - III		Client /Server Computing	3	1	0	4	25	75	100
				Multimedia Systems							
				Distributed Computing							
	V	Extension Activity		NSS/NCC/ CSS				1			
				Total				25			600



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

**NON-MAJOR – ELECTIVE**

**SEMESTER 1**

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CI A	External	
I	I V	Non Major Elective - I	NE S28 01	1. HTML	2	0	0	2	25	75	100
			NE S28 02	2. Business and Office Applications I	2	0	0	2	25	75	100
			NE S28 03	3.Ms-Access I	1	0	1	2	25	75	100
			NE S28 05	4.Web Application I	1	0	1	2	25	75	100
			NE S 280 6	5.Flash I	1	0	1	2	25	75	100

\*students will be provided an option to choose any one course from above electives



*V. Senthil*  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembalamban Koil Street,  
 West K.K. Nagar, Chennai-600 078

**NON-MAJOR – ELECTIVE**

**SEMESTER II**

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CI A	External	
I	I V	Non Major Elective - I	NE S28 04	1. HTML LAB	2	0	0	2	25	75	100
			NE S28 07	2. Business and Office Applications II	2	0	0	2	25	75	100
			NE S28 08	3.Ms-Access II	1	0	1	2	25	75	100
			NE S28 09	4.Web Application II	1	0	1	2	25	75	100
			NE S28 10	5.Flash II	1	0	1	2	25	75	100

\*students will be provided an option to choose any one course from above electives



*Pr. S. Ganesh*

PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No. 12, Vembalambalam Koll Street,  
 W. Co. K.K. Nagar, Chennai-600 078

### CORE ELECTIVES- SEMESTER V

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CIA	External	
IV	III	Core Elective I	CS2408	Visual Programming	2	1	2	5	40	60	100
			CS2409	RDBMS & ORACLE	2	1	2	5	25	75	100
			CS2410	UNIX Programming	2	1	2	5	25	75	100

\*students will be provided an option to choose any one course from above electives

### CORE ELECTIVES- SEMESTER V

Semester	Part	Course Components	Course		Teaching Per Week			Course Credits	University Examination		Total Marks
			Code	Title	L	T	P		CIA	External	
IV	III	Core Elective I	CS2416	Data Mining	2	2	1	5	25	75	100
			CS2417	E-Commerce	2	2	1	5	25	75	100
			CS2418	Objected Oriented Analysis & Design	2	1	2	5	25	75	100



*V. S. Senthil*

PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No. 12, Venkateswara Koil Street,  
 West K.K. Nagar, Chennai-600 079

## SEMESTER I

Title of the Course/ Paper	Fundamentals Of Digital Computers		
Core	I Year & First Semester	Credit: 3	CA2101
Objective of the course	To Understanding the basic fundamentals of computer To convert one number to another, binary codes, logic gates To Able to understand design of Counters To Able to understand de multiplexer, multiplexer and design circuits using ROM		
Course outline	Unit 1: Fundamentals of computers – Characteristics of computers – Computer Language – Operating Systems – Generation of Computers. Unit-2: Number systems - Conversion from one number system to another - compliments - Binary codes - Binary logic - Logic gates - Truth tables. Unit 3: Boolean Algebra - Axioms - Truth table simplification of Boolean function - map method (upto 5 Variables) - Mc-Clausky tabulation method Unit-4: Sequential logic – RS, JK, D and T Flip flops - Registers –Shift Registers - Counters – Ripple Counters – Synchronous Counter – Design of Counters Unit-5 :Adders – Subtractors – Decoders – Encoders – Multiplexer - Demultiplexer – Design of Circuits using decoders/Multiplexers – ROM – PLA – Designing circuits using ROM/PLA		

### COURSE OUTCOMES:

**CA2101.1:** Understanding the basic fundamentals of computer

**CA2101.2:** Able to convert one number to another, binary codes, logic gates

**CA2101.3:** Able to understand design of Counters

### Mapping Function of PO's and CO's & PSO's


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CA2101.1	3	3	3	1	3	2	1
CA2101.2	3	2	1	2	1	1	3
CA2101.3	1	3	1	1	3	2	2
Average	2.33	2.66	1.66	1.33	2.33	1.67	2



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Veerabhadra Pillai Street,  
 West K.K. Nagar, Chennai-600 076

Title of the Course/ Paper	<b>PC Software LabCA2102</b>	
Objective of the course	This course gives an exposure to Various Software of Office Package	
Course outline	<p><b>MSWORD</b></p> <ol style="list-style-type: none"> <li>1. Text Manipulations.</li> <li>2. Usage of Numbering, Bullets, Footer and Headers.</li> <li>3. Usage of Spell check, and Find &amp; Replace.</li> <li>4. Text Formatting.</li> <li>5. Picture insertion and alignment.</li> <li>6. Creation of documents, using templates.</li> <li>7. Creation templates</li> <li>8. Mail Merge Concepts</li> <li>9. Copying Text &amp; Pictures from Excel</li> </ol> <p><b>MS-EXCEL</b></p> <ol style="list-style-type: none"> <li>10. Cell Editing</li> <li>11. Usage of Formulae and Built-in Functions</li> <li>12. File Manipulations</li> <li>13. Data Sorting (both number and alphabets)</li> <li>14. Worksheet Preparation</li> <li>15. Drawing Graphs</li> <li>16. Usage of Auto Formatting</li> </ol> <p><b>POWER POINT</b></p> <ol style="list-style-type: none"> <li>17. Inserting Clip arts and Pictures</li> <li>18. Frame movements of the above</li> <li>19. Insertion of new slides</li> <li>20. Preparation of Organisation Charts</li> <li>21. Presentation using Wizards</li> <li>22. Usage of design templates</li> </ol>	



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

### COURSE OUTCOMES:

**CA2102.1:** Understand the principles of creating an word excel and power point document, including an in-depth consideration of information architecture.

**CA2102.2:** Become familiar with graphic design principles that relate to power point and learn how to implement theories into practice.

**CA2102.3:** This knowledge will allow you to build on the skills you will have and to understand the potentials and limitations placed on creating documents.

### Mapping Function of PO's and CO's & PSO's

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CA2102.1	2	1	2	2	0	2	0
CA2102.2	2	2	1	1	2	1	2
CA2102.3	0	2	1	2	1	2	1
Average	2.00	1.67	1.33	1.67	1.5	1.67	1.5




*V. Senthil*  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078



## SEMESTER II

<b>TITLE OF THE COURSE/ PAPER</b>	<b>Programming in C</b>		
<b>CORE</b>	I Year & Second Semester	Credit: 4	<b>CA2201</b>
<b>COURSE OBJECTIVES</b>	<p>To learn the fundamental programming concepts and methodologies which are essential to building good C programs.</p> <p>To learn different control structures like decision control, loop control and special cases.</p> <p>To develop an in-depth understanding of functions, prototypes and parameter passing</p> <p>To design and develop C programs, using the concept of arrays, structures, pointers, operations on pointers and creation and deletion of files.</p>		
<b>COURSE OUTLINE</b>	<b>Unit 1:</b> C fundamentals Character set- Identifier and keywords- data types- constants- Variables - Declarations - Expressions - Statements - Arithmetic, Unary, Relational and logical, Assignment and Conditional Operators - Library functions.		
	<b>Unit-2:</b> Data input output functions - Simple C programs - Flow of control - if, if-else, while, do-while, for loop, Nested control structures- Switch, break and continue, goto statements- Comma operator.		
	<b>Unit 3:</b> Functions – Definition - proto-types - Passing arguments - Recursions. Storage Classes - Automatic, External, Static, Register Variables – Multi-file programs.		
	<b>Unit-4:</b> Arrays - Defining and Processing - Passing arrays to functions – Multi-dimension arrays - Arrays and String. Structures - User defined data types - Passing structures to functions - Self-referential structures – Unions - Bit wise operations.		
	<b>Unit-5 :</b> Pointers - Declarations - Passing pointers to Functions - Operation in Pointers - Pointer and Arrays - Arrays of Pointers - Structures and Pointers - Files : Creating , Processing , Opening and Closing a data file.		
<b>REFERENCES</b>	<ol style="list-style-type: none"> <li>1. i.E.Balaguruswamy, 1995, Programming in ANSI C, TMH Publishing Company Ltd.</li> <li>2. i.B.W. Kernighan and D.M.Ritchie, 1988, The C Programming Language, 2<sup>nd</sup> Edition, PHI.</li> <li>3. ii.H. Schildt, C, 2004, The Complete Reference, 4<sup>th</sup> Edition, TMH</li> <li>4. Gottfried, B.S, 1996, Programming with C, Second Edition, TMH Pub. Co. Ltd., New Delhi</li> <li>5. Kantar Y., 1999, Let us C, BPB Pub., New Delhi.</li> </ol>		



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Autonomous - Deemed to be University)  
 No. 12, Venkateswara Nagar Road Street,  
 West of P. O. 600 078 Chennai-600 078

**COURSE OUTCOMES:**

**CA2201.1:** Understanding the basic concepts of programming and to analyse a problem to develop an algorithm to solve it.

**CA2201.2:** Able to design, implement programs using the fundamental control structures in C.

**CA2201.3:** Able to define data types and use them in simple data processing applications, mathematical and engineering applications.

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CA2201	2	1	3	2	3	3	2
CA2201	2	3	1	3	1	1	2
CA2201	3	2	2	1	2	2	1
Average	2.33	2.00	2.00	2.00	2.00	2.00	1.67




*V. Senthil*

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

<b>TITLE OF THE COURSE/ PAPER</b>	<b>Practical – I Programming in C</b>		
<b>CORE</b>	I Year & Second Semester	Credit: 4	<b>CA2202</b>
<b>COURSE OBJECTIVES</b>	<p>To train the students to the basic concepts of the C programming language.</p> <p>It involves a lab component which is designed to give the student hands-on experience with the concepts.</p> <p>To apply good programming principles to the design and implementation of C Programs</p> <p>To demonstrate an understanding of primitive data types, values, operators and expressions in C Programs.</p>		

<b>COURSE OUTLINE</b>	<p>I Summation of Series :</p> <ol style="list-style-type: none"> <li>1. Sin(x), 2. Cos(x), 3. Exp(x) ( Comparison with built in functions ) II</li> </ol> <p>String Manipulation :</p> <ol style="list-style-type: none"> <li>1. Counting the no. of vowels, consonants, words, white spaces in a line of text and array offline</li> <li>2. Reverse a string &amp; check for palindrome.</li> <li>3. Substring detection, count and removal</li> </ol> <p>II Finding and replacing substrings</p> <ol style="list-style-type: none"> <li>1. Addition &amp; Subtraction Multiplication Transpose, and trace of a matrix</li> <li>2. Determinant of a Matrix Sorting and Searching</li> <li>3. Insertion Sort Bubble Sort Linear Search Binary Search</li> </ol> <p>III Recursion :</p> <ol style="list-style-type: none"> <li>1. <math>{}^n P_r, {}^n C_r</math></li> <li>2. GCD of two numbers</li> <li>3. Fibonacci sequence</li> <li>4. Maximum &amp; Minimum</li> <li>5. Towers of Hanoi. IV</li> </ol> <p>Matrix Manipulation:</p>
-----------------------	--



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

## COURSE OUTCOMES:

**CA2202.1:** Able to Read, understand and trace the execution of programs written in C language.

**CA2202.2:** Able to enhance their analyzing and problem solving skills and use the same for writing programs in C.

**CA2202.3:** Identify tasks in which the numerical techniques learned are applicable and apply them to write programs, and hence use computers effectively to solve the task.

## Mapping Function of PO's and CO's & PSO's

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CA2202.1	3	1	2	2	2	2	1
CA2202.2	2	3	2	3	3	3	3
CA2202.3	1	3	3	3	2	2	3
Average	2.00	2.33	2.33	2.67	2.33	2.33	2.33




*V. Senthil*

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

### SEMESTER III

Title of the Course/	<b>PROGRAMMING IN C++ AND DATA STRUCTURES</b>		
Core	<b>II Year &amp; Third Semester</b>	Credit: 4	<b>CS2402</b>
Objective of the course	<p>To learn the basics of C++ programming</p> <p>To understand the purpose of constructors and destructors</p> <p>To work with files and file pointers in the C++ program</p> <p>To understand stack and Queue</p>		
Course outline	<p>Unit 1: Introduction to C++; Tokens, Keywords, Identifiers, Variables, Operators, Manipulators, Expressions and Control Structures in C++; Pointers - Functions in C++ - Main Function - Function Prototyping - Parameters Passing in Functions- ValuesReturnbyFunctions-InlineFunctions-FriendandVirtual Functions</p>		
	<p>Unit-2: Classes and Objects; Constructors and Destructors; and Operator Overloading and Type Conversions - Type of Constructors - Function overloading. Inheritance : Single Inheritance - Multilevel Inheritance - Multiple Inheritance - Hierarchical Inheritance - Hybrid Inheritance. Pointers, Virtual Functions and Polymorphism; Managing Console I/O operations.</p>		
	<p>Unit 3: Working with Files: Classes for File Stream Operations - Opening and Closing a File - End-of-File Deduction - File Pointers - Updating a File - Error Handling during File Operations - Command-line Arguments. Data Structures: DefinitionofaDatastructure-primitiveandcompositeDataTypes,Asymptotic notations, Arrays, Operations on Arrays, Orderlists.</p>		
	<p>Unit-4: Stacks - Applications of Stack - Infix to Postfix Conversion, Recursion, Maze Problems - Queues - Operations on Queues, Queue Applications, Circular Queue. Singly Linked List - Operations, Application - Representation of a Polynomial, Polynomial Addition; Doubly Linked List - Operations, Applications.</p>		
	<p>Unit-5 : Trees and Graphs: Binary Trees - Conversion of Forest to Binary Tree, Operations - Tree Traversals; Graph - Definition, Types of Graphs, Hashing Tables and Hashing Functions, Traversal - Shortest Path; Dijkstra's Algorithm.</p>		
	<p><b>REFERENCES</b></p> <ol style="list-style-type: none"> <li>1. E. Balagurusamy, 1995, Object Oriented Programming with C++, Tata McGraw-Hill Publishing Company Ltd.</li> <li>2. E.Horowitz and S.Shani, 1999, Fundamentals of Data Structures in C++ , Galgotia Pub.</li> <li>3. Robert Lafore, Object Oriented Programming in Microsoft C++ Galgotia publication. ii..</li> <li>H.Schildt, C++ 1998, The Complete Reference</li> </ol>		



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembulianunan Koil Street,  
 West K.K. Nagar, Chennai-600 078

**COURSE OUTCOME:**

**CS2402.1:** Able to understand the basic concepts of programming and develop basic programs

in C++

**CS2402.2:** Able to understand the concepts of and construct programs using constructors, destructors, functions and operator overloading

**CS2402.3:** Able to work with File concept

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2402.1	3	1	2	2	2	2	2
CS2402.2	3	3	2	2	2	3	3
CS2402.3	1	2	3	3	3	3	3
Average	2.33	2.00	2.33	2.33	2.33	2.67	2.67



PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	<b>PRACTICAL – III DATA STRUCTURES USING C++</b>		
Core	<b>II Year &amp; Third Semester</b>	Credit: 4	<b>CS2453</b>
Objective of the course	1. To teach the students to build a program with basic concepts of the C++ programming language. 2. It involves a lab component which is designed to give the student better experience with the concepts. 3. To apply good programming principles to the design and implementation of objects in C++ Programs 4. To demonstrate an understanding of primitive data types, values, operators and expressions in C++ Programs		
Course outline	1. Implement PUSH, POP operations of stack using Arrays. 2. Implement PUSH, POP operations of stack using Pointers. 3. Implement add, delete operations of a queue using Arrays. 4. Implement add, delete operations of a queue using Pointers. 5. Conversion of infix to postfix using stack operations 6. Postfix Expression Evaluation. 7. Addition of two polynomials using Arrays and Pointers. 8. Creation, insertion, and deletion in doubly linked list. 9. Binary tree traversals (in-order, pre-order, and post-order) using linked list. 10. Depth First Search and Breadth first Search for Graphs using Recursion.		

**COURSE OUTCOME:**

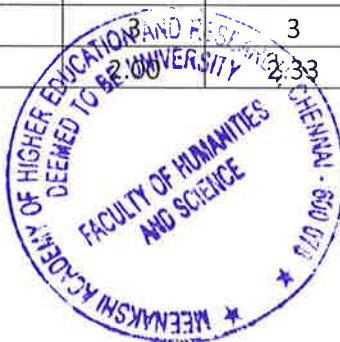
**CS2453.1:** Able to read, understand and trace the execution of programs written in C++ language


**CS2453.2:** Able to analyze enhance problem solving skills and use the same and construct programs in C++

**CS2453.3:** Identifying the task where objects are applied and use them to construct the program

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
<b>CS2453.1</b>	2	1	2	2	2	2	3
<b>CS2453.2</b>	1	2	2	2	2	3	2
<b>CS2453.3</b>	3	3	3	3	2	2	2
Average	2.00	2.33	2.33	2.33	2.00	2.33	2.33



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	MICROPROCESSORS AND ITS APPLICATIONS		
Core	II Year & Third Semester		MA2568
Objective of the course	To basics of microcomputer and microprocessor and assembly language To understand the techniques of assembly language To understand time delay and debugging counter To understand about ASCII and BCD		
Course outline	Unit 1: Introduction to microcomputers-microprocessor and assembly languages-microprocessor architecture and its operations-8085 MPU-8085 instruction set and classifications Unit 2: Writing assembly level programs-programming techniques such as looping-counting and indexing addressing modes-data transfer instructions-arithmetic and logic operations-dynamic debugging Unit 3:Counters and time delays-hexadecimal counter modulo 10 counter-pulse timings for flashing lights-debugging counter and time delay program-stack-subroutine-conditional call and return instructions Unit 4:BCD to binary and binary to BCD conversions-BCD to HEX and HEX to BCD conversions-ASCII to BCD to ASCII conversions-BCD to seven segment LED code conversions-binary to ASCII and ASCII to binary conversions-multi byte addition-multi byte subtraction-BCD addition-BCD subtraction-multiplication and division Unit 5:Interrupt-implementing interrupts-multiple interrupt 8085-trap-problems on implementing 8085 interrupt-DMA memory interfaces-RAM & ROM –I/O interface-direct I/O memory mapped I/O.		

**COURSE OUTCOME:**

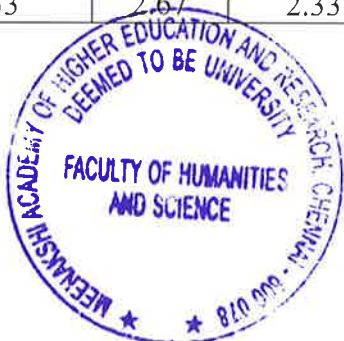
**MA2568.1:** Understand the basics of microcomputer and microprocessor and assembly language


**MA2568.2:** Able to understand techniques of writing assembly level language

**MA2568.3:** Able to understand debugging counter and time delay program

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
MA2568.1	2	3	3	2	3	2	2
MA2568.2	2	2	2	2	2	3	3
MA2568.3	3	3	2	2	3	3	3
Average	2.33	2.67	2.33	2.00	2.67	2.67	2.67



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078



## SEMESTER IV

Title of the Course/	<b>PROGRAMMING IN JAVA</b>		
Core	<b>II Year &amp; Fourth Semester</b>	Credit: 4	<b>CS2403</b>
Objective of the course	To understand the basics concepts of programming in JAVA To provide knowledge about Methods class Inheritance overriding and its importance in Java programming To get knowledge about Thread ,Synchronization To understand about Applets and its importance		
Course outline	Unit 1: Introduction to Java-Features of Java-Basic Concepts of Object Oriented Programming-Java Tokens-Java Statements-Constants-Variables-Data Types- Type Casting-Operators-Expressions-Control Statements: Branching and LoopingStatements.		
	Unit-2: Classes, Objects and Methods-Constructors-Methods Overloading-Inheritance-Overriding Methods-Finalizer and Abstract Methods-Visibility Control – Arrays, Strings and Vectors-String Buffer Class-Wrapper Classes.		
	Unit 3: Interfaces-Packages-Creating Packages-Accessing a Package-Multithreaded Programming-Creating Threads-Stopping and Blocking a Thread-Life Cycle of a Thread-Using Thread Methods-Thread Priority- Synchronization-Implementing the Runnable Interface.		
	Unit-4: Managing Errors and Exceptions-Syntax of Exception Handling Code- Using Finally Statement-Throwing Our Own Exceptions-Applet Programming- Applet Life Cycle-Graphics Programming-Managing Input/output Files: Concept of Streams-Stream Classes-Byte Stream Classes-Character Stream Classes – Using Streams-Using the File Class-Creation of Files-Random Access Files-Other Stream Classes.		
	Unit-5: : Network basics –socket programming – proxy servers – TCP/IP – Net Address – URL – Datagrams -Java Utility Classes-Introducing the AWT: Working with Windows, Graphics and Text- AWT Classes- Working with Frames-Working with Graphics-Working with Color-Working with Fonts- Using AWT Controls, Layout Managers and Menus.		

### COURSE OUTCOME:

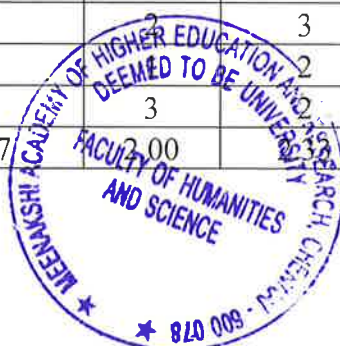
**CS2403.1:** Able to understand the basics concepts of programming in JAVA

**CS2403.2:** Able to understand concepts such as classes, objects methods-constructors overloading methods etc

**CS2403.3:** Able to write and manage errors and exceptions and write syntax of Exception handling Code

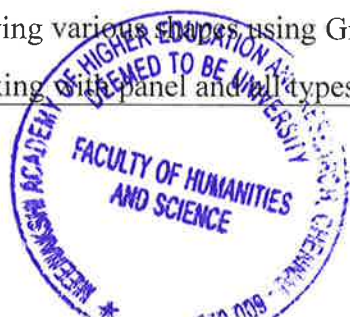
### Mapping Function of PO's and CO's & PSO's


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2403.1	3	2	3	3	3	1	2
CS2403.2	2	2	2	3	2	2	3
CS2403.3	3	3	00	2	2	3	2
Average	2.67			2.67	2.33	2.00	2.33



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	<b>PRACTICAL – IV: JAVA PROGRAMMING LAB</b>		
Core	<b>II Year &amp; Fourth Semester</b>	Credit: 4	<b>CS2454</b>
Objective of the course	<p>1. To give the practical training in JAVA programming</p> <p>2. To train the students to build a program with substring and string buffer class of Java programming language.</p> <p>3. It is to train the students for better experience with the concepts of array class and Interface.</p> <p>4. To make students construct programs with Applets</p>		
Course outline	<p><b>APPLICATIONS:</b></p> <ol style="list-style-type: none"> <li>1. Substring Removal from a String. Use String Buffer Class.</li> <li>2. Determining the Perimeter and Area of a Triangle. Use Stream Class.</li> <li>3. Determining the Order of Numbers Generated randomly using Random Class.</li> <li>4. Usage of Calendar Class and Manipulation.</li> <li>5. Implementation of Point Class for Image Manipulation.</li> <li>6. String Manipulation Using Char Array.</li> <li>7. Database Creation for Storing E-mail Addresses and Manipulation.</li> <li>8. Usage of Vector Classes.</li> <li>9. Interfaces and Packages</li> <li>10. Implementing Thread based Applications and Exception Handling.</li> <li>11. Application using Synchronization such as Thread based, Class based and Synchronized Statements.</li> <li>12. Text files (copy, display, counting characters, words and lines)</li> <li>13. Data file creating and processing for electricity billing.</li> <li>14. Data file creating and processing for telephone billing</li> </ol> <p><b>APPLETS:</b></p> <ol style="list-style-type: none"> <li>15. Working with Frames and Various Controls.</li> <li>16. Working with Dialog Box and Menus.</li> <li>17. Working with Colors and Fonts.</li> <li>18. Drawing various shapes using Graphical statements.</li> <li>19. Working with panel and all types of Layout.</li> </ol>		



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

	<p>20. Design a simple calculator with minimal of 10 operations</p> <p>21. Usage of buttons, labels, text components in suitable application</p> <p>22. Usage of Radio buttons, check box ,choice list insuitable application.</p>
--	--

**COURSE OUTCOME:**

**CS2454.1:** Able to read, understand and trace the execution of programs written in JAVA language


**CS2454.2:** Able to analyze enhance problem solving skills and use the same and construct programs in JAVA

**CS2454.3:** Identifying the task where graphics are applied and use them to construct the program

**Mapping Function of PO's and CO's & PSO's**


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2454.1	2	1	3	1	2	2	2
CS2454.2	3	2	2	2	2	3	3
CS2454.3	2	3	1	3	1	1	2
Average	2.33	2.00	2.00	2.00	1.67	2.00	2.33



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

Title of the Course/	<b>OPERATING SYSTEMS</b>		
Core	<b>II Year &amp; Fourth Semester</b>		<b>CS2404</b>
Objective of the course	<p>1.To introduces the functions of operating systems.</p> <p>2.To gather knowledge and understand the concepts such as the process thread and CPU scheduling</p> <p>3.To teach the types of memory and about memory management</p> <p>4.To Knowledge the students with I/O system</p>		
Course outline	<p><b>Unit 1:</b>Introduction: Views –Goals –Types of system – OS Structure – Components – Services - System Structures – Layered Approach -Virtual Machines - System Design and Implementation. Process Management: Process - Process Scheduling – Cooperating Process –Threads - Interprocess Communication. CPU Scheduling : CPU Schedulers – Scheduling criteria – Scheduling Algorithms</p> <p><b>Unit-2:</b>– Process Synchronization: Critical-Section problem - Synchronization Hardware – Semaphores – Classic Problems of Synchronization – Critical Region – Monitors. Deadlock: Characterization – Methods for handling Deadlocks – Prevention, Avoidance, and Detection of Deadlock - Recovery from deadlock.</p> <p><b>Unit 3:</b> Memory Management: Address Binding – Dynamic Loading and Linking – Overlays – Logical and Physical Address Space - Contiguous Allocation – Internal &amp; External Fragmentation . Non Contiguous Allocation: Paging and Segmentation schemes –Implementation – Hardware Protection – Sharing - Fragmentation.</p> <p><b>Unit-4:</b> VirtualMemory: Demand Paging – Page Replacement - Page Replacement Algorithms – Thrashing. – File System: Concepts – Access methods – Directory Structure –Protection Consistency Semantics – File System Structures – Allocation methods – Free Space Management.</p> <p><b>Unit-5 :</b> I/O Systems: Overview - I/O Hardware – Application I/O Interface – Kernel I/O subsystem – Transforming I/O Requests to Hardware Operations – Performance. Secondary Storage Structures: Protection – Goals- Domain Access matrix – The security problem – Authentication – Threats – Threat Monitoring – Encryption..</p>		



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

	<p><b>Reference</b></p> <p>i. Silberschatz A., Galvin P.B., Gange,. 2002, Operating System Principles, Sixth Edition, John Wiley &amp; Sons.</p> <p>ii. H.M. Deitel ,1990, An Introduction to Operating System,- Second Edition,AddisonWesley.</p>
--	--

**COURSE OUTCOME:**

**CS2404.1:** Understand the basics in Operating System


**CS2404.2:** Able to understand the concepts such as the process thread and CPU scheduling

**CS2404.3:** Able to understand the Memory management concepts and allocation

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2404.1	3	2	2	3	3	2	3
CS2404.2	3	3	3	2	1	2	2
CS2404.3	3	1	1	1	2	1	2
Average	3.00	2.00	2.00	2.00	2.00	1.67	2.33



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	<b>COMPUTER GRAPHICS</b>		
Core	<b>II Year &amp; Fourth Semester</b>	Credit: 4	<b>CS2405</b>
Objective of the course	<p>To introduces the concepts of Computer Graphics.          To teach about the tools and methods to design a picture          To teach Three dimensional transformation          To teach about the hidden surface and hidden line elimination</p>		
Course outline	<p><b>Unit-1:</b> Brief Survey of Computer Graphics – Graphics Systems: Video Display Devices – Types – Raster-Scan Systems and Random-Scan Systems – Input Devices – Hard-Copy Devices – Graphics Software.</p> <p><b>Unit-2:</b> Line-Drawing (DDA and Bresenham’s) Algorithms – Circle-Generating (Midpoint) Algorithm – Ellipse-Generating (Midpoint) Algorithms – Area-Filling (Boundary-Fill and Flood-Fill) Algorithms - Line Attributes - Color and Grayscale Levels – Character Attributes – Inquiry Functions .</p> <p><b>Unit-3:</b> Line-Drawing (DDA and Bresenham’s) Algorithms – Circle-Generating (Midpoint) Algorithm – Ellipse-Generating (Midpoint) Algorithms – Area-Filling (Boundary-Fill and Flood-Fill) Algorithms - Line Attributes - Color and Grayscale Levels – Character Attributes – Inquiry Functions .</p> <p><b>Unit-4:</b> Three-Dimensional Display Methods: Parallel and Perspective Projections – Depth Cueing - Visible Line and Surface Identification – Polygon Surfaces: Polygon Tables, Plane Equations and Polygon Meshes - Three-Dimensional Transformations: Basic, Other and Composite Transformations.</p> <p><b>Unit-5 :</b> Viewing Pipeline and Coordinates – Transformation from World to Viewing Coordinates – Projection Transformations - Matrices - View Volumes - Hidden Surface and Hidden Line Elimination Methods: Back-Face Detection , Depth-Buffer and A-Buffer Methods – -Wireframe Methods.</p>		
	<p><b>Reference</b></p> <ol style="list-style-type: none"> <li>1. D.Hearn and M.P. Baker, 2005, Computer Graphics , C Version, 2<sup>nd</sup> Edition , Pearson Education , New Delhi.</li> <li>2. W.M.Newman and R.F.Sproull, 1997, 2<sup>nd</sup> Edition , Principles of Interactive Computer Graphics, Tata McGraw-Hill Publishing Co. Ltd.</li> <li>3. Ii .D.P.Mukherjee, 1999, Fundamentals of Computer Graphics and Multimedia, 1<sup>st</sup> Edition, Prentice-Hall of India Pvt. Ltd. – 1999.</li> <li>4. N. Krishnamurthy , 2002, Introduction to Computer Graphics, 1<sup>st</sup> Edition, Tata McGraw-Hill Publishing Co. Ltd...</li> </ol>		



PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

**COURSE OUTCOME:**

**CS2405.1:** Understand the basics of Computer Graphics


**CS2405.2:** Able to understand the tools for producing pictures

**CS2405.3:** Able to understand to show moving pictures and thus it is possible to produce animations with computer graphics.

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2405.1	3	2	2	3	3	2	3
CS2405.2	3	3	3	2	1	2	2
CS2405.3	3	1	1	1	2	1	2
Average	3.00	2.00	2.00	2.00	2.00	1.67	2.33



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembullamman Koil Street,  
West K.K. Nagar, Chennai-600 078

## SEMESTER V

Title of the Course/	<b>Paper - X - DATABASE MANAGEMENT SYSTEMS</b>		
Core	<b>III Year &amp; Fifth Semester</b>	Credit: 4	<b>CS2406</b>
Objective of the course	To introduces the basic concepts of database management systems To understand the basic queries To write the quires with the constrains To understand object oriented database		
Course outline	Unit 1: Advantages and Components of a Database Management Systems – Feasibility Study – Class Diagrams – Data Types – Events – Normal Forms – Integrity – Converting Class Diagrams to Normalized Tables – Data Dictionary.		
	Unit-2: Query Basics – Computation Using Queries – Subtotals and GROUP BY Command – Queries with Multiple Tables – Subqueries – Joins – DDL & DML – Testing Queries		
	Unit 3: Effective Design of Forms and Reports – Form Layout – Creating Forms – Graphical Objects – Reports – Procedural Languages – Data on Forms – Programs to Retrieve and Save Data – Error Handling.		
	Unit-4: Power of Application Structure – User Interface Features – Transaction – FormsEvents–CustomReports–DistributingApplication–TableOperations – Data Storage Methods – Storing Data Columns – Data Clustering and Partitioning.		
	Unit-5 : Database Administration – Development Stages – Application Types – Backup and Recovery – Security and Privacy – Distributed Databases – Client/Server Databases – Web as a Client/Server System – Objects – Object Oriented Databases – Integrated Applications.		
	<b>REFERENCE</b> <ol style="list-style-type: none"> <li>1. G. V. Post – Database Management Systems Designing and Building Business Application – McGraw Hill International edition –1999.</li> <li>2. Raghu Ramakrishnan – Database Management Systems – WCB/McGraw Hill – 1998.</li> <li>3. C.J. Date – An Introduction to Database Systems – 7<sup>th</sup> Edition – Addison Wesley - 2000.</li> </ol>		

### COURSE OUTCOME:

**CS2406.1:** Understand the basics of concepts of DBMS and its use


**CS2406.2:** Able construct the basic queries for the management of data's in the database

**CS2406.3:** Able to group the data's in the table

### Mapping Function of PO's and CO's & PSO's

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2406.1	2	1	1	2	2	2	3
CS2406.2	2	3	2	2	3	2	2
CS2406.3	3	2	3	3	1	2	2
Average	2.33	2.00	2.00	2.33	2.00	2.00	2.33



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078



Title of the Course/	<b>PRACTICAL – V: RDBMS LAB</b>		
Core	<b>III Year &amp; Fifth Semester</b>	Credit: 4	<b>CS2455</b>
Objective of the course	To train the students to implement the database applications To equip the students to design a form using Visual basic 6.0 To teach the students to create a database using Oracle To train the students to connect the database with the form designed using VB 6.0		
Course outline	CreatedatabaseandperformingtheoperationsgivenbelowusingaMenuDriven program: Insertion, (b)Deletion, (c)Modification, (d)Generating a reports (Simple) for the following Systems using any RDBMS package :  Payroll Mark sheet Processing Savings bank account for banking Inventory System Invoice system Library information system Student information system Income tax processing system Electricity bill preparation system Telephone directory maintenance.		

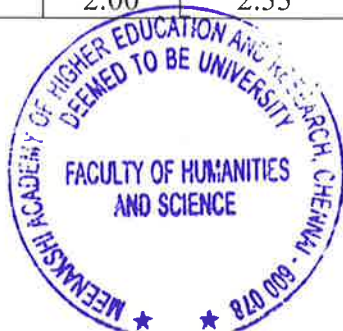
**COURSE OUTCOME:**


**CS2455.1:** Able to create table with the required fields and connect them with the form designed using Visual Basics

**CS2455.2:** Able to design the form in visual basic using the tools available in the toolbox create a user friendly interface

**CS2455.3:** Able design a proper application for any institution using database and visual programming

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2455.1	2	1	2	2	2	2	3
CS2455.2	1	2	2	2	2	3	2
CS2455.3	3	3	3	3	2	2	2
Average	2.00	2.00	2.33	2.33	2.00	2.33	2.33



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembulianman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

Title of the Course/ Paper	<b>VISUAL PROGRAMMING</b>		
Elective	<b>III Year &amp; Fifth Semester</b>	Credit: 5	<b>CS2408</b>
Objective of the course	To inculcate knowledge on Visual Basic concepts and Programming. To build knowledge to design a form To understand the various properties of visual programming To understand and the concept of connectivity		
	Unit 1: Customizing a Form - Writing Simple Programs - Toolbox - Creating Controls - Name Property - Command Button - Access Keys - Image Controls - Text Boxes - Labels - Message Boxes - Grid - Editing Tools - Variables - Data Types - String - Numbers.		
	Unit-2: Displaying Information - Determinate Loops - Indeterminate Loops - Conditionals - Built-in Functions - Functions and Procedures.		
	Unit3:Lists-Arrays-SortingandSearching-Records-ControlArrays-Combo Boxes - Grid Control - Projects with Multiple forms – DoEvents and Sub Main – ErrorTrapping.		
	Unit-4: VB Objects - Dialog Boxes - Common Controls - Menus - MDI Forms - Testing, Debugging and Optimization - Working with Graphics.		
	Unit-5 : Monitoring Mouse activity - File Handling - File System Controls - File System Objects - COM/OLE - automation - DLL Servers - OLE Drag and Drop.		
	<b>1. Recommended Texts</b> <ol style="list-style-type: none"> <li>1. Gary Cornell - Visual Basic 6 from the Ground up - Tata McGraw Hill - 1999.</li> <li>2. Noel Jerke - Visual Basic 6 (The Complete Reference) - Tata McGraw Hill – 1999</li> </ol>		

**COURSE OUTCOME:**

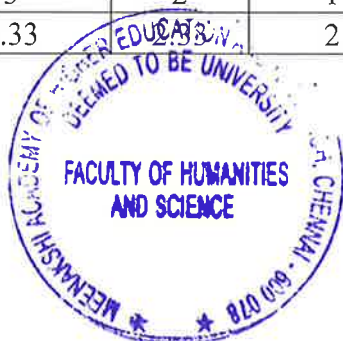
**CS2408.1:** Understand the basics in Visual Programming language


**CS2408.2:** Able to display information using the form design concept and database connection

**CS2408.3:** able to understand the purpose and designing of the MDI

**Mapping Function of PO's and CO's & PSO's**


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2408.1	2	3	2	2	2	2	3
CS2408.2	2	2	3	3	3	2	2
CS2408.3	3	2	1	2	1	2	2
Average	2.33	2.33	2	2.33	2	2.00	2.33



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	<b>SOFTWARE ENGINEERING</b>		
Core	<b>III Year &amp; Fifth Semester</b>		<b>CS2407</b>
Objective of the course	<p>To introduces the concepts of Life Cycle of Software</p> <p>To understand the various stage of developing a software</p> <p>To cultivate the knowledge about each stages involved during the software development</p> <p>To understand the design techniques</p>		
Course outline	<p>Unit-1: Introduction to Software Engineering Some definition – Some size factors – Quality and productivity factors – Managerial issue. Planning a Software Project: Defining the problem – Developing a solution strategy – planning the development process – planning an organization structure – other planning activities</p> <p>Unit-2: Software Cost Estimation: Software – Cost factors – Software cost estimation techniques – specification techniques – level estimation – estimating software maintenance costs.</p> <p>Unit-3: Software requirements definition: The software requirements specification – formal languages and processors for requirements specification.</p> <p>Unit-4: Software Design: Fundamental Design concepts – Modules and modularizing Criteria – Design Notations – Design Techniques – Detailed Design Consideration – Real time and distributed system design – Test plan – Mile stones walk through and inspection – Design guide lines</p> <p>Unit-5: Verification and validation techniques: Quality assurance – Static analysis – symbolic exception – Unit testing and Debugging – System testing – Formal verification.</p> <p>Software maintenance: Enhancing maintainability during development – Managua aspects of software maintenance – Configuration management – source code metrics – other maintenance tools and techniques.</p>		
	<p><b>1. Recommended Texts</b></p> <p>i. Richard E.Fairly - Software Engineering Concepts - Tata McGraw-Hill book Company.</p> <p><b>2. Reference Books</b></p> <p>i. R.S.Pressman, 1997, Software Engineering – 1997 - Fourth Ed., McGraw Hill.</p> <p>ii. Rajib Mall ;2004 Fundamentals of Software Engineering,2<sup>nd</sup> Edition, PHI</p>		



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078.

**COURSE OUTCOME:**


**CS2407.1:** Understand the basics in Visual Programming language

**CS2407.2:** Able to display information using the form design concept and database connection

**CS2407.3:** able to understand the purpose and designing of the MDI

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2407.1	2	2	1	1	1	2	2
CS2407.2	1	2	2	2	2	3	2
CS2407.3	3	1	3	1	2	2	3
Average	2.00	1.67	2.00	1.33	1.67	2.33	2.33




  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078.

## SEMESTER VI

Title of the Course/	<b>WEB TECHNOLOGY</b>	
Core	<b>III Year &amp; Sixth Semester</b>	<b>CS2412</b>
Objective of the course	<p>To introduces the concepts of ASP, VB Script, Java Script.</p> <p>To cultivate knowledge about the scripting language</p> <p>To understand the concept for designing web pages</p> <p>To understand the purpose of Security in developing web applications</p>	
Course outline	<p>Unit 1: Introduction to VBScript - Adding VBScript Code to an HTML Page - VB Script Basics - VBScript Data Types - VBScript Variables - VBScript Constants - VBScript Operators – mathematical- comparison-logical - Using Conditional Statements - Looping Through Code - VBScript Procedures – type casting variables - math functions –date functions – string functions –other functions - VBScript Coding Conventions - Dictionary Object in VBScript - Err Object</p> <p>Unit-2: Introduction to JavaScript – Advantages of JavaScript – JavaScript syntax - Data type –Variable - Array – Operator &amp; Expression – Looping – control structures - Constructor Function – user defined function Dialog Box .</p> <p>Unit 3: JavaScript document object model – Introduction – Object in HTML – Event Handling – Window object – Document object – Browser object – Form object – Navigator object – Screen object – Build in object – User defined object – Cookies.</p> <p>Unit-4: ASP.NET Language Structure – Page Structure – Page event , Properties &amp; Compiler Directives . HTML server controls – Anchor, Tables, Forms, Files . Basic Web server Controls – Label, Text box, Button, Image Links, Check &amp; radio Button, Hyperlink, Data List Web Server Controls – Check box list. Radio button list, Drop down list, List box, Data grid, Repeater.</p> <p>Unit-5: Request and Response Objects, Cookies, Working with Data – OLEDB connection class, command class, transaction class, data adaptor class, data set class. Advanced issues – email, Application issues, working with IIS and page Directives , error handling.</p> <p>Security – Authentication, IP Address, Secure by SSL &amp; Client Certificates</p>	



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Venkatesan Koil Street,  
 West K.K. Nagar, Chennai-600 078

	<b>REFERENCE</b>
	<ol style="list-style-type: none"> <li>1. I.Bayross, 2000, Web Enable Commercial Application Development Using HTML, DHTML, JavaScript, Perl CGI, BPB Publications.</li> <li>2. A.Russell Jones, Mastering Active Server Pages 3, BPB Publications.</li> <li>3. HathleenKalata, Internet Programming with VBScript and JavaScript, Thomson Learning</li> <li>4. Mike McGrath, XML Harness the Power of XML in easy steps, Dreamtech Publications</li> <li>5. T.A. Powell, 2002, Complete Reference HTML , TMH.</li> <li>6. J.Jaworski, 1999, Mastering JavaScript, BPB Publications.</li> </ol>

**COURSE OUTCOME:**

**CS2412.1:** Understand the basics of VB Script, Java Script, ASP.Net and Database

**CS2412.2:** Able to understand the concept web base languages

**CS2412.3:** Able gather knowledge about scripting language and design programs

**Mapping Function of PO's and CO's & PSO's**


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2412.1	2	2	3	1	2	2	2
CS2412.2	3	3	2	2	1	1	1
CS2412.3	1	3	1	3	3	3	3
Average	2.00	2.67	2.00	2.00	2.00	2.00	2.00



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH,  
 (Deemed to be University)  
 No: 12, Veinbuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

Title of the Course/	<b>Practical – VI -WEB APPLICATIONS LAB</b>	
Core	<b>III Year &amp; Sixth Semester</b>	<b>CS2456</b>
Objective of the course	<p>To gives training in web design and applications.</p> <p>To enhance students script a program using JavaScript and VB script</p> <p>To make the students implement various concepts and design a web application</p> <p>To train the students to design a web application using the tools available in each application</p>	
	<p><b><u>VB SCRIPT &amp; JAVASCRIPT</u></b></p> <ol style="list-style-type: none"> <li>1. Write a program outputs the squares, roots, cubes and complements of integers between 1 and 100.</li> <li>2. Create a calculator.</li> <li>3. Write a script to Sort numbers and strings</li> <li>4. Create a program to generate a hit counter</li> <li>5. Create a program to verify whether email address provided by user is valid or invalid.</li> <li>6. Write a program to scroll the text on status bar.</li> <li>7. The form consists of two multiple choice list and one single choice list <ol style="list-style-type: none"> <li>a. the first multiple choice list display the major dishes available.</li> <li>b. the second Multiple choice list display the stocks available.</li> <li>c. The single choice list display the miscellaneous (Milkshakes, soft drinks, softy available etc.)</li> </ol> </li> <li>8. Write a script to create a digital clock.</li> <li>9. Create a web page using two image file which switch black and white one another as the mouse pointer move over the image. Use the On Mouse over and On Mouse event, onDbleclick handler</li> <li>10. Build a WWW page with an image and 3 buttons., Pick three favorite graphics, Label the buttons and make each one swap in the graphic you have chosen</li> <li>11. Create a frameset that has two frames, side by side.</li> </ol> <p>Make the left-hand frame contain a form with 3 radio buttons</p> <p>The buttons should be for three search engines:</p>	



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai-600 078

- Yahoo (<http://www.yahoo.com>)
- Altavista (<http://www.altavista.com>)
- Infoseek (<http://www.infoseek.com>)

When the user clicks on of the option buttons, the frame on the right hand side should be loaded with the right search engine.

12. Write a program to implement Employee database with all validation

### ASP

1. Create a login form, to expire, if the user does not type the password within 100

seconds

2. Create an employee database and manipulate the records using command object in ASP

3. Develop an application to illustrate the usage of Request and Response Objects in

ASP.

4. Write an ASP program using Request Object to give the exact list of headers sent by

the browser to the Web server.

5. Create an Active Server Page to display the records one by one from a student Database. The student database should contain roll no, name, marks & total.

7. Design an ASP application that describes books in the Online Bookshop. (Use AD

Rotator Component, Content Rotator Component, Content Linking Component)

8. Create a document and add a link to it. When the user moves the mouse over the link it

should load the linked document on its own (User is not required to click on the link).

9. Create a document, which opens a new window without a toolbar, address bar, or a

Status bar that unloads itself after one minute.

10. Create a document that accepts the user's name in a text field form and displays the

same the next time when the user visits the site informing him that he has accessed





	the site for the second time, and so on.
--	--

**COURSE OUTCOME:**

**CS2456.1:** Able to read understand and trace the program


**CS2456.2:** Able to enhance and design the program and solve the problem

**CS2456.3:** Able to identify which condition or iteration to be used and how to execute a program

**Mapping Function of PO's and CO's & PSO's**


Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2456.1	2	1	2	2	1	3	3
CS2456.2	2	2	1	3	2	1	2
CS2456.3	1	3	1	2	1	2	1
Average	1.67	2.00	1.33	2.33	1.33	2.00	2



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

Title of the Course/ Paper	<b>DATA MINING</b>		
Elective	<b>III Year &amp; Sixth Semester</b>		<b>CS2415</b>
Objective of the course	<p>To introduces the fundamental concepts of Data Mining.</p> <p>To understand the methods and techniques such association rules, data clustering and Classification</p> <p>To understand architecture of data mining system</p> <p>To learn about RID based system</p> <p>To understand the mining Association rules</p>		
Course outline	<p>Unit-1: Introduction: Data mining – Functionalities – Classification – Introduction to Data Warehousing – Data Preprocessing : Preprocessing the Data – Data cleaning – Data Integration and Transformation – Data Reduction</p> <p>Unit-2: Data Mining, Primitives, Languages and System Architecture: Data Mining – Primitives – Data Mining Query Language,. Architectures of Data mining Systems. Concept Description, Characterization and Comparison: Concept Description, Data Generalization and Summarization, Analytical Characterization, Mining Class Comparison – Statistical Measures.</p> <p>Unit-3: Mining Association Rules: Basics Concepts – Single Dimensional Boolean Association Rules From Transaction Databases, Multilevel Association Rules from transaction databases – Multi dimension Association Rules from Relational Database and Data Warehouses.</p> <p>Unit-4: Classification and Prediction: Introduction – Issues – Decision Tree Induction – Bayesian Classification – Classification of Back Propagation. Classification based on Concepts from Association Rule Mining – Other Methods. Prediction – Introduction – Classifier Accuracy.</p> <p>Unit-5: Cluster Analysis: Introduction – Types of Data in Cluster Analysis, Partitioning Methods – Hierarchical Methods Density Based Methods – GRID Based Method – Model based Clustering Method.</p>		
	<p>REFERENCES</p> <ol style="list-style-type: none"> <li>1. J.Han and M. Kamber, 2001, Data Mining Concepts and Techniques, Harcourt India Pvt.Ltd - New Delhi.</li> <li>2. K.P. Soman, ShyamDiwakar, V.Ajay, 2006, Insight into Data Mining Theory and Practice, Prentice Hall of India Pvt. Ltd - New Delhi.</li> <li>3. Website, E-learning resources</li> </ol> <p>i <a href="http://www.academicpress.com">http:// www.academicpress.com</a></p> <p>ii. <a href="http://www.mkp.com">http://www.mkp.com</a></p>		



  
 PRINCIPAL  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West K.K. Nagar, Chennai - 600 078

**COURSE OUTCOME:**

**CS2415.1:** Understand the basic concepts and the purpose of data mining


**CS2415.2:** Able to understand the methods and techniques such association rules, data clustering and classification

**CS2415.3:** Able to learn advanced techniques for emerging application

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2415.1	2	1	2	2	2	2	1
CS2415.2	2	2	1	2	1	2	2
CS2415.3	3	3	3	1	3	2	3
Average	2.33	2.00	2.00	1.67	2.00	2.00	2.00



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

Title of the Course/ Paper	<b>CLIENT / SERVER COMPUTING</b>	
Elective	<b>III Year &amp; Sixth Semester</b>	<b>CS2416</b>
Objective of the course	<p>To deals with the C/S Computing, GUI.</p> <p>To learn the evolutions of C/S Computing</p> <p>To understand GUI Environment and Testing interface in C/S computing</p> <p>To learn and understand transaction processing and Backup and recovery mechanism</p>	
Course outline	<p>Unit-1: Introduction to Client/Server Computing – What is Client/Server Computing – Benefits of Client/Server Computing – Evolution of C/S Computing – Hardware Trends – Software Trends-Evolution of Operating Systems – N/w Trends – Business Considerations.</p> <p>Unit-2: Overview of C/S Applications: Components of C/S Applications – Classes of C/S Applications – Categories of C/S Applications. Understanding C/S Computing: Dispelling the Myths – Obstacles – Upfront &amp; Hidden – Open Systems &amp; Standards – Standards – Setting Organizations – Factors of Success.</p> <p>Unit-3: The Client Hardware &amp; Software : Client Component – Client Operating Systems – What is GUI – Database Access – Client Software Products : GUI Environments – Converting 3270/5250 Screens – Database Tools – Client Requirements : GUI Design Standards – Open GUI Standards – Interface Independence – Testing Interfaces .</p> <p>Unit-4:The Server : Categories of Servers – Features of Server Machines – Classes of Server Machines – Server Environment : N/W Management Environment – N/W Computing Environment – Extensions – Network Operating System – Loadable Module.</p> <p>Unit-5 : Server Operating System : OS/2 2.0 – Windows New Technology – Unix Based OS – Server Requirements : Platform Independence – Transaction Processing – Connectivity – Intelligent Database – Stored Procedure – Triggers – Load Leveling – Optimizer – Testing and Diagnostic Tools – Backup &amp; Recovery Mechanisms.</p>	
	<p><b>1. Recommended Texts</b></p> <p>1. Patrick Smith &amp; Steven Cheneveth, “Client/Server Computing”. PHI</p> <p>2. Dawna Travis Deire, “Client/Server Computing”. TMH</p>	



**COURSE OUTCOME:**

**CS2416.1:** Understand the basics of client server computing benefits evolution


**CS2416.2:** Able to get an overview about the components of client server computing and classes of client server applications

**CS2416.3:** Able to learn understand Client operating system, GUI, Open GUIStandards

**Mapping Function of PO's and CO's & PSO's**

Course Outcome	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2416.1	2	1	3	3	2	1	2
CS2416.2	3	3	2	2	3	2	2
CS2416.3	1	0	0	1	1	1	2
Average	2.00	2.00	2.50	2.00	2.00	1.33	2.00



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Mamburam Kailash Street,  
Vengal Rao Nagar, Bangalore - 560078

Title of the Course/	<b>DATA COMMUNICATION AND NETWORKING</b>		
Core	<b>III Year &amp; Sixth Semester</b>	Credit: 4	Code: CS2601
Objective of the course	This course introduces the details about basic concepts of data communication and networking.		
Course outline	Unit 1: Introduction to Data Communication, Network, Protocols & standards and standards organizations - Line Configuration - Topology - Transmission mode - Classification of Network - OSI Model - Layers of OSI Model. Unit-2: Parallel and Serial Transmission - DTE/DCE/such as EIA-449, EIA-530, EIA-202 and x.21 interface - Interface standards - Modems - Guided Media - Unguided Media - Performance - Types of Error - Error Detection - Error Corrections. Unit 3: : Multiplexing - Types of Multiplexing - Multiplexing Application - Telephone system - Project 802 - Ethernet - Token Bus - Token Ring - FDDI - IEEE 802.6 - SMDS - Circuit Switching - Packet Switching - Message switching - Connection Oriented and Connectionless services. Unit-4:History of Analog and Digital Network - Access to ISDN - ISDN Layers - Broadband ISDN - X.25 Layers - Packet Layer Protocol - ATM - ATM Topology - ATM Protocol. Unit-5 : Repeaters - Bridges - Routers - Gateway - Routing algorithms - TCP/IP Network, Transport and Application Layers of TCP/IP - World Wide Web <b>REFERENCES</b> <ol style="list-style-type: none"> <li>Jean Walrand 1998,Communication Networks (A first Course),Second Edition, WCB/McGraw Hill.</li> <li>Behrouz and Forouzan, 2006,Data Communication and Networking,3<sup>rd</sup> Edition ,TMH.</li> </ol>		

### **COURSE OUTCOMES**

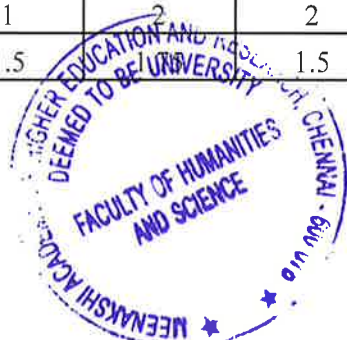
**CS2601.1:** Able to understand the basics of data communication, networking, internet and their importance.


**CS2601.2:** To analyze the services and features of various protocol layers in data networks and differentiate wired and wireless computer networks

**CS2601.3:** Able to understand and analyze the TCP/IP and their protocols.

### **MAPPING FUNCTION OF PO's, CO's & PSO's**

CO'S	PROGRAM OUTCOMES					PSO'S	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CS2601.1	2	1	1	2	1	2	2
CS2601.2	2	2	2	1	2	2	1
CS2601.3	1	2	2	1	1	2	1
CS2601.4	2	1	2	2	2	2	2
Average	1.75	1.5	1.5	1.5	1.5	2	1.5



  
**PRINCIPAL**  
**FACULTY OF HUMANITIES & SCIENCE**  
**MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
**(Deemed to be University)**  
**No: 12, Vembuliamman Koil Street,**  
**West: K.K. Nagar, Chennai-600 078**

Title of the Course/	<b>SOFTWARE TESTING</b>		
Core	<i>III Year &amp; Sixth Semester</i>	4	CS2414
Objective of the course	This course introduces the basic concepts of software testing		
Course outline	Unit-1: Introduction: Purpose – Productivity and Quality in Software – Testing Vs Debugging – Model for Testing – Bugs – Types of Bugs – Testing and Design Style.		
	Unit-2: Flow/Graphs and Path Testing – Achievable paths – Path instrumentation – Application – Transaction Flow Testing Techniques		
	Unit-3: Data Flow Testing Strategies - Domain Testing: Domains and Paths – Domains and Interface Testing .		
	Unit-4: Linguistic –Metrics – Structural Metric – Path Products and Path Expressions. Syntax Testing – Formats – Test Cases .		
	Unit-5 : Logic Based Testing – Decision Tables – Transition Testing – States, State Graph, State Testing.		

**COURSE OUTCOME:**

CO601.1: Understand the basic concepts and the purpose of software technique


CO601.2: Able Understand flow graph and path testing

CO601.3: Able to learn dataflow testing strategy

**MAPPING FUNCTIONS OF PO's, CO's & PSO,s**

CO's	PROGRAM OUTCOMES					PSO'S	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO601.1	2	1	2	1	1	2	1
CO601.2	2	1	2	2	1	2	1
CO601.3	2	2	2	2	1	1	2
CO601.4	2	2	1	2	2	1	1



  
 PRI...  
 FACULTY OF HUMANITIES & SCIENCE  
 MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
 (Deemed to be University)  
 No: 12, Vembuliamman Koil Street,  
 West: K.K. Nagar, Chennai-600 078.

## ANNEXURE I

### MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH FACULTY OF HUMANITIES AND SCIENCE

(Deemed to be University)

### SYLLABUS

### PART I-TAMIL

Common for UG students who study PART I - Tamil for four semesters/ two semesters (i.e. B.A.(English)/ B.Sc.(Mathematics),B.Sc(Computer Science), B.Sc (Visual Communication),B.C.A/B.Com.(General),B.Com (CS),B.Com (CA) & B.B.A)

### முதற்பருவம் (First Semester)

#### 1.செய்யுள்:

அ.	மனோன்மணியம்	தமிழ்த் தெய்வ வணக்கம் 'நீராருங் கடலுடுத்த' என்று தொடங்கும் முதற்பாடல் 'கடல்குடித்த...' என்று தொடங்கும் ஆறு கண்ணிகள்.
ஆ.	இராமலிங்க அடிகளார்	ஆறாந்திருமுறையில் இடம் பெற்றுள்ள அருள் விளக்க மாலையில் 'கோடையிலே', 'கதிக்கு வழி, தனித்தனி' எனத் தொடங்கும் மூன்று பாடல்கள் மட்டும்.
இ.	கவிமணி தேசிய விநாயகம் பிள்ளை	மலரும் மாலையும் என்னும் நூலில் இடம் பெற்றுள்ள 'கோவில் வழிபாடு' வாழ்க்கைத் தத்துவங்கள் எனும்; தலைப்பிலுள்ள கவிதை முழுமையும்.
ஈ.	பாரதியார்	'கண்ணன் என் சேவகன்' என்ற தலைப்பில் அமைந்துள்ள கவிதை முழுமையும்.
உ.	பாரதிதாசன்	'அழகின் சிரிப்பு' நூலில் இடம் பெற்றுள்ள 'ஆல்' என்ற தலைப்பில் உள்ள பாடல்கள்.
ஊ.	ஈரோடு தமிழன்பன்	'அந்த நந்தனை எரித்த நெருப்பின் மிச்சம்' என்ற நூலில் இடம் பெற்றுள்ள 'வாக்குச் சீட்டுகளுக்கு ஓர் அர்த்தம் வரட்டும்' என்னும் கவிதை மட்டும்.
எ.	கவிஞர் வைரமுத்து	திருத்தி எழுதிய தீர்ப்புகள் என்னும் நூலில் இடம் பெற்றுள்ள 'நிலத்தை ஜெயித்த விதை கவிதை மட்டும்.
2.	இலக்கணம்	
	இலக்கணக்குறிப்பு	பாடத்திட்டத்தில் இடம் பெற்றுள்ள செய்யுட்களில் அமைந்துள்ள இலக்கணக் குறிப்புகளை எடுத்துக் காட்டுதல்.
3.	மொழித்திறன்	
	1. கலைச் சொல்லாக்கம் 2. நேர் காணல் 3. பொருந்திய சொல் தருதல் 4. மரபுத் தொடர்.	
4.	பாடந்தழுவிய இலக்கிய வரலாறு	
5.	பொதுக்கட்டுரை	
	Note: இடஞ்சுட்டிப் பொருள் விளக்கம் செய்யுள் பகுதியில் இடம் பெற வேண்டும்.	



PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078



இரண்டாம் பருவம் (Second Semester)

1.செய்யுள்:

அ.	திருநாவாவுக்கரசர் தேவாரம்	நான்காம் திருமுறை- நமச்சிவாயத் திருப்பதிகம் 10 பாடல்கள்
ஆ.	குலசேகர ஆழ்வார்	பெருமாள் திருமொழி - 'ஆலைநீள் கரும்பன்னவன் எனத் தொடங்கும் தேவகி புலம்பல் (முழுமையும்)
இ.	நளவெண்பா	கலி நீங்கு காண்டம் தேர்ந்தெடுக்கப்பட்ட 40 பாடல்கள்
ஈ.	சீறாப்புராணம்	மானுக்குப் பிணை நின்றபடலம் தேர்ந்தெடுக்கப்பட்ட 65 பாடல்கள்
உ.	கண்ணதாசன்	ஏசு காவியம்-பாடுகளின் பாதை - தேர்ந்தெடுக்கப் பட்ட பாடல்கள் மட்டும்
2.	இலக்கணம் இலக்கணக் குறிப்பு -செய்யுட் பகுதியில் அமைதல் வேண்டும்.	
3.	உரைநடை டாக்டர் மு.வ.வின் 'நல்வாழ்வு' நூல் முழுமையும் பாரி நிலையம் சென்னை -60 108	
4.	பாடந் தழுவிய இலக்கிய வரலாறு	
5.	மொழி பெயர்ப்பு பொது (ஆங்கிலத்திலிருந்து தமிழ்) இடஞ்சுட்டிப் பொருள் விளக்கம் செய்யுட் பகுதியில் இடம் பெற வேண்டும்.	



*(Handwritten signature)*

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

# SYLLABUS

## Part I Tamil

Common for UG/ students who study PART II - Tamil for four semesters

(i.e. B.A.(English)/ B.Sc.(Mathematics), B.Sc(Computer Science), B.Sc (Visual Communication))

### 1.செய்யுள்:

திருக்குறள்	- அன்புடைமை	- அதிகாரம்	8
	கல்வி	- அதிகாரம்	40
	கேள்வி	- அதிகாரம்	42
	அறிவுடைமை	- அதிகாரம்	43
	சிலப்பதிகாரம்	- வழக்குரை காதை	
	மணிமேகலை	- 17. உலக அறவி புக்க காதை	
	சீவக சிந்தாமணி	- விமலையார் இலம்பகம் (42 பாடல்கள்)	
	கம்பராமாயணம்	- சூகப்படலம் (46 பாடல்கள்)	
	பெரிய புராணம்	- காரைக்கால் அம்மையார் புராணம்	

### 2. இலக்கணம்:

செய்யுள் பகுதியிலிருந்து அணி இலக்கணம் மட்டும்.

### 3. சிறுகதை:

அறிஞர் அண்ணாவின் சிறுகதைகள்

1. கொக்கரக்கோ
2. சரோஜா ஆறணா
3. பேய் ஓடிப் போச்சு
4. 1938-40 ஒரு வசீகர வரலாறு
5. சாது
6. செவ்வாழை
7. பொங்கல் பரிசு
8. வேலை போச்சு
9. விழுப்புரம் சந்திப்பு
10. காலிழந்தான்

### 4.பாடம் தழுவிய இலக்கிய வரலாறு:

நீதி இலக்கியங்கள், ஐம்பெருங்காப்பியங்கள், சோழர் கால இலக்கியங்கள்.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman K.,  
West K.K. Nagar, Chennai.

5. பயன்பாட்டுத் தமிழ்:

1. அகர வரிசைப் படுத்துதல்
2. ஒரு பொருள் குறித்த பல சொற்கள்
3. பல பொருள் குறித்த ஒரு சொல்
4. எழுத்துப் பிழை நீக்கம்
5. ஒற்றுப் பிழைகளை நீக்கி எழுதுதல்
6. தொடர் பிழை நீக்கம்
7. பிறமொழிச் சொற்களை நீக்கி எழுதுதல்.



PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembusamman Koil Street,  
West K.K. Nagar, Chennai-60

நான்காம் பருவம் ( Fourth Semester)

1. செய்யுள்:

புறநானூறு : 212, 213, 214, 215, 216

- அ. 212 பாடியவர் -பிசிராந்தையார், கோப்பெருஞ்சோழனின் மாண்பைப் பாடியது. திணை -இயன்மொழி “நுங்கோ யாரென வினவின் எங்கோக்...” (10 அடிகள்)
- ஆ. 213 பாடியவர் - புல்லாற்றூர் எயிற்றயினார் கோப்பெருஞ்சோழன் தன் மக்கள் மேல் போருக்கு எழுந்த போது பாடியது. வஞ்சித் திணை, துணை வஞ்சித்துறை “மண்டமர் அட்ட மதனுடைய நோன்றாள்” (24 அடிகள்)
- இ. 214 கோப்பெருஞ்சோழன் வடக்கிருந்த போது பாடியது. பொதுவியல் திணை. பொருண்மொழிக்காஞ்சித்துறை “செய்குவம் கொல்லோ நல்வினை எனவே” (13 அடிகள்)
- ஈ. 215 கோப்பெருஞ்சோழன் பிசிராந்தையார் வருவார் எனப் பாடியது. பாடாண் திணை, இயன்மொழித்துறை “கவைக் கதிர் வரகின் அவைப்புறு வாக்கல்...” (9 அடிகள்)
- உ. 216 கோப்பெருஞ்சோழன் பாடல், பாடாண்திணை இயன்மொழித் துறை. “கேட்டல் மாத்திரை அல்லது யாவதும்...” 12 அடிகள்)

குறுந்தொகை : பாடல் எண், 2, 3, 16, 20, 31, 40, 49, 69, 124, 167

- |             |   |   |   |
|-------------|---|---|---|
| பா.எண் 2 -  | குறிஞ்சித்திணை<br>இறையனார்                | - | தலைவன் கூற்று<br>“கொங்குதேர் வாழ்க்கை ....”5    |
| பா.எண். 3 - | குறிஞ்சித்திணை<br>தேவகுலத்தார்            | - | தலைவி கூற்று<br>“நிலத்தினும் பெரிதே ...” 4      |
| பா.எண்.16 - | பாலைத்திணை<br>பாலை பாடிய<br>பெருங்கடுங்கோ | - | தோழி கூற்று<br>“உள்ளார் கொல்லோ தோழி .....5      |
| பா.எண். 20- | பாலைத்திணை<br>கோப்பெருஞ்சோழன்             | - | தலைவி கூற்று<br>“அருளும் அன்பும் நீக்கித் ...”4 |
| பா.எண். 31- | மருதத்திணை<br>ஆதிமந்தியார்                | - | தலைவி கூற்று<br>“மள்ளார் குழீகிய விழவினாலும் 6  |
| பா.எண். 40- | குறிஞ்சித் திணை<br>செம்புலப்பெயல் நீரார்  | - | தலைவன் கூற்று<br>“யாயும் ஞாயும்...” 5           |
| பா.எண். 49- | நெய்தல் திணை<br>அம்முவனார்                | - | தலைவி கூற்று<br>“அணிற் பல்லன்ன ....5            |
| பா.எண். 69- | குறிஞ்சித்திணை<br>கடுந்தோட் காவிரினார்    | - | தோழி கூற்று<br>கருங்கண் தாக்கலை .... 6          |



PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembulianman Koil Street,  
West K.K. Nagar, Chennai-600 078

பா.எண். 69-	குறிஞ்சித்திணை கடுந்தோட் கரவீரனார் -	தோழி கூற்று "கருங்கண் தாக்கலை .... 6
பா.எண். 124-	பாலைத்திணை பாலை பாடிய பெருங்கடுங்கோ -	தோழி கூற்று உமணர் சேர்ந்து ....4
பா.எண். 167-	முல்லைத்திணை கூடலூர்கிழார் -	செவிலித்தாய் கூற்று "முளிதயிர் பிசைந்த ...6
கலித்தொகை:	நெய்தற்கலி 133 பாலைக்கலி 9 பட்டினப்பாலை -	"மாமலர் முண்ட .... "எறித்தருகதிர்த் .... முழுவதும்

இலக்கணம்: திணை, துறை, விளக்கம்


நாடகம்: "பாண்டியன் பரிசு" - பாரதிதாசன்

இலக்கிய வரலாறு : பாடம் தழுவிய இலக்கிய வரலாறு

சங்க இலக்கியங்கள்: பாட்டும் தொகையும்

மொழிபெயர்ப்பு : அலுவலகக் கடிதம் (ஆங்கிலத்திலிந்து தமிழில்  
மொழிபெயர்த்தல்)  
இடம் சுட்டிப் பொருள் விளக்கம் செய்யுட் பகுதியில்  
அமைதல் வேண்டும்.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembulkamman Koil Street,  
West K.K. Nagar, Chennai-600 078

# SYLLABUS

## PART II - ENGLISH

Common for UG students who study PART II - English for four semesters/ two semesters (i.e. B.A.(English)/ B.Sc.(Mathematics),B.Sc(Computer Science), B.Sc (Visual Communication),B.C.A/B.Com.(General),B.Com (CS),B.Com (CA) & B.B.A)

### First Year - First Semester

#### Unit I Prose :

Textures of English ( Cambridge University Press India Pvt. Limited )

Headache	–	R.K. Narayan
A Little Bit of What You Fancy	–	Desmond Morris
My Early Days	–	Abdul Kalam
How to Escape from Intellectual Rubbish	–	Russell
Town by the Sea	–	Amitav Ghosh
Key To Courage	–	I.A. R Wylie

#### Unit II Poetry :

Verse ( Macmillan Publishers India Limited)

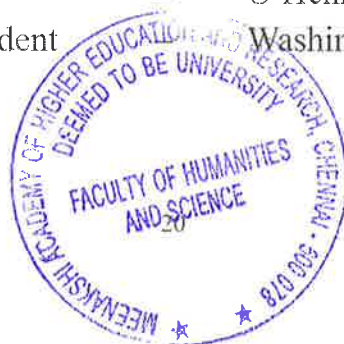
Written in Early Spring	–	Wordsworth
When I have Fears	–	John Keats
Ulysses	–	Tennyson
Obituary	–	Ramanujan
The Unknown Citizen	–	Auden
For Elkana	–	Ezekiel


#### Unit III Short Stories

Vignettes A Collection of Short Stories Ed. Dr.P. N.Ramani

(New Century Book House( P) Limited)

Upper Division Clerk	–	Manohar Malgonkar
The Doll's House	–	Katherine Mansfield
Marriage is a Private Affair	–	Chinua Achebe
The Man Who Knew Too Much	–	Alexander Baron
The Ransom of Red Chief	–	O Henry
The Adventure of the German Student	–	Washington Irving



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**Unit IV**

**Grammar**

Tense, Aspect, Auxiliaries ( Primary and Modal), Concord, Negatives, Interrogatives ( Yes or No, Wh) Tag questions, Completing the sentences , Common errors  
Synonym, Antonym, Word class, Use in sentences of words ( Text based)

**Unit V**

Functional English Comprehension, Note Making,  
A Handbook of English Grammar – Dr. H.M. Williams and  
Dr. V. Saraswathi ( Anu Chitra Publications)



A handwritten signature in green ink, appearing to be "V B".

PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**PART II - ENGLISH**  
**Second Semester**

**Unit I Prose :**

Textures of English ( Cambridge University Press India Pvt. Limited )

History of Chess	—	Barbara Mack
To Know When to Say, "It's None of Your Business"	—	Mc Cormick
The India of My Dreams	—	Indira Gandhi
The Second Crucifixion	—	Collins and Lapiere
How to Avoid Argument	—	Sam Horn
Six Thinking Hats	—	Edward Bono

**Unit II Poetry :**

Verse ( Macmillan Publishers India Limited)

Leave this Chanting	—	Tagore
The Stone	—	Gibson
Mending Wall	—	Frost
The Ballad of Father Gilligan	—	W.B. Yeats
Hawk Roosting	—	Hughes
The Listeners	—	De La Mare

**Unit III Biographical sketches**

Portraits in Prose –An Anthology of Biographical Sketches  
Ed: S.Jagadisan (Orient Blackswan Private Limited)

Socrates	—	Sir Richard Livingstone
Sir Issac Newton	—	Nathaniel Hawthorne
Leo Tolstoy	—	Ronald Seth
Alexander Fleming	—	Philip Cane
Mother Teresa	—	John Frazer
Martin Luther King	—	R.N.Roy

**Unit IV Grammar**


Grammar Voice, Articles, Prepositions, Reported Speech,  
Conditional sentence,  
Completing the sentences, Common Errors  
Synonym, Antonym, Word class.  
Use in sentences ( Words as different word classes -Text based))

**Unit V**

**Functional English** Completing a dialogue , Expansion of hints  
Use in sentences ( Words as different word classes -Text based))

A Handbook of English Grammar – Dr. H.M. Williams and  
Dr. V. Saraswathi ( Ananda Mitra Publications)



  
FACULTY OF HUMANITIES AND SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078



## Part II English

Common for UG/ students who study PART II - English for four semesters  
(i.e. B.A.(English)/ B.Sc.(Mathematics), B.Sc.(Computer Science),  
B.Sc (Visual Communication)

### Second Year - Third Semester

#### Unit I – Prose

Classic Assets ( Emerald Publishers)

My Visions for India	–	Abdul Kalam
On Saying Please	–	A. G. Gardiner
The Lady or the Tiger?	–	Frank Stockton
How to be a Doctor	–	Stephen Leacock
The Sporting Spirit	–	George Orwell
The Portrait of a Lady	–	Kushwant Singh

#### Unit II – Drama

Six One Act Plays Ed; Dr. Nafeesa Kaleem –  
(Anu Chitra Publications)

The Dear Departed	–	Stanley Houghton
The Boy Comes Home	–	A. A. Milne
The Discovery	–	Herman Ould
The Shirt	–	Francis Dillon
The Pie and the Tart	–	Hugh Chesterton
Refund	–	Fritz Karinthy

#### Unit III – Fiction

Stevenson – Dr. Jekyll and Mr. Hyde ( Retold by Kennet) – S. Chand & Company Ltd

#### Unit IV – Grammar


Grammar Clauses, Types of sentences, Linkers, Adjectives and Adverbs, Degree of Comparison, Conjunctions and Sentence Linkers  
Gerunds and infinitives,  
Beginning sentences with It  
Completing the sentences  
Synonym, Antonym, Word class  
Use in sentences ( Phrases - Text based)

#### Unit V

Functional English Letter Writing( Informal), Report Writing, Diary writing

A Handbook of English Grammar – Dr. H.M. Williams and Dr. V. Saraswathi ( Anu Chitra Publications)



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 23, Balaraman Koil Street  
West Block, Egmore, Chennai-500

## PART II – ENGLISH

### SECOND YEAR - Fourth Semester

(Effective from the academic year 2009 -2010 for the students admitted from 2008 -09)

#### Unit I – Prose

Classic Assets ( Emerald Publishers)

Tree Speaks	–	C. Rajagopalchari
Nehru - Some Memories	–	Arnold Toynbee
Tolerance	–	E.M.Forster
The Lion and the Lamb	–	Leonard Clark
Professions for Women	–	Virginia Woolf
Little Things	–	Samuel Smiles

#### Unit II – Drama

Selected Scenes from Shakespeare's Plays – Book I  
( Emerald Publishers)

Funeral Oration ( Julius Caesar)  
Trial for a Pound of flesh ( The Merchant of Venice)  
He Kills Sleep ( Macbeth)  
Play out a Play( Henry IV Part I)  
Patterns of Love ( As You Like It)

#### Unit III – Fiction

Arthur Conan Doyle – The Hound of the Baskervilles – Abridged by Aanand Kuma Raju  
(Blackie Books)

#### Unit IV

Grammar - Phrasal Verbs-  
Transformation of Sentences Negatives, voice, direct and  
Indirect , Changing clauses into phrases and phrases into  
Clauses, Common Errors Completing the sentences  
Synonym, Antonym, Word class  
Use in sentences ( Idioms - Popular ones only)

#### Unit V

Functional English Letter Writing( Formal), CV, Paragraph Writing  
Use in sentences ( Idioms - Text based)  
A Handbook of English Grammar – Dr. H.M. Williams and  
Dr. V. Saraswathi ( Ann Chitra Publications) Rs.52/-



PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

## SYLLABUS

### SOFT SKILL I, II , III

Common for UG/ students who study

(i.e. B.A.(English)/ B.Sc.(Mathematics),B.Sc(Computer Science), B.Sc (Visual Communication), BCA, BBA, B.COM(GEN),(C.A),(C.S))

### SOFT SKILLS –I

### ESSENTIALS OF LANGUAGE AND COMMUNICATION

#### OBJECTIVES

We enable students to build a repertoire of functional vocabulary and to move from the lexical level to the syntactic level. we train students to summon words, phrases relevant to the immediate communication tasks. we enable students to comprehend the concept of communication. v teach students the four basic communication skills Listening, Speaking, Reading and Writing.

#### UNIT 1:

Recap of language skills - vocabulary, phrase, clause, sentence.

#### UNIT 2:

Fluency building

#### UNIT 3:

Principles of Communication

#### UNIT 4:

Types of Communication

#### UNIT 5:


LSRW in Communication.

#### REFERENCE:

#### WEBSITES :

1. [www.shg-india.net](http://www.shg-india.net)
2. [www.tnruralbazaar.com](http://www.tnruralbazaar.com)



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai - 600 078

## SOFT SKILLS – II

### ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS

#### OBJECTIVES:

We train Students to become aware of their thinking style and to enable them to convert thinking into performance. We prepare students to evolve mental models for intra-personal and inter-personal transactions. We make students reflect and improve their use of body language - Posture, Gesture, Facial expression, Tone.

#### UNIT I:

Thinking and Articulation - Cognitive, Affect, critical, creative aspects of articulation.

#### UNIT II:

Acquisition of Oral and Aural Skills.

#### UNIT III:

Communication Boosters - Body language.

#### UNIT IV:

Function of Cultural Codes in Presentation - Etiquette.

#### UNIT V:


Models of Presentation.

#### REFERENCES

#### RECOMMENDED TEXTS:

1. Powell 1998. MacMillan Company
2. Cotton, et al. Market Leader. Longman.
3. Pease, Allan. 1998. Body Language: How to Read Others Thoughts by their Gestures. Sudha Publications. New Delhi.
4. Gardner, Howard. 1993. Multiple Intelligences: The Theory in Practice: A Reader. Basic Books. New York.
5. De Bono, Edward. 2000. Six Thinking Hats. 2nd Edition. Penguin Books.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

## SOFT SKILL III

### PERSONALITY ENRICHMENT

#### OBJECTIVES

To make students understand the concepts and components of personality, thereby to apply the acquired knowledge to themselves and to march towards excellence in their respective academic careers. 2. To enable students to keep themselves abreast of general knowledge and current information. 3. To bring out creativity and other latent talents with proper goal setting so that self-esteem gets enhanced. 4. To sharpen memory skills and other study skills which are vital for academic excellence. 5. To give training for positive thinking which will keep the students in a good stead at the time of crisis.

#### UNIT I: INTRODUCTION

Definition of Personality Components of Personality - structural and functional aspects. Determinants of Personality- biological, psychological and socio-cultural factors. Assessment of Personality - observation, interview and psychological tests. Misconceptions and Classifications. Need for personality development.

#### UNIT II: SELF-AWARENESS AND SELF MOTIVATION

1. Self analysis through SWOT and Johari window. 2. Elements of motivation. 3. Seven rules of motivation. 4. Techniques and strategies for self motivation. 5. Motivation checklist and Goal setting based on the principle of SMART. 6. Self motivation and life.

#### UNIT III: GENERAL KNOWLEDGE AND CURRENT AFFAIRS

1. Regional, National and International events. 2. Geographical, political and historical facts. 3. Information on sports and other recreational activities. 4. Basic knowledge with regard to health and health promotion.

#### UNIT IV: MEMORY, DECISION MAKING AND STUDY SKILLS

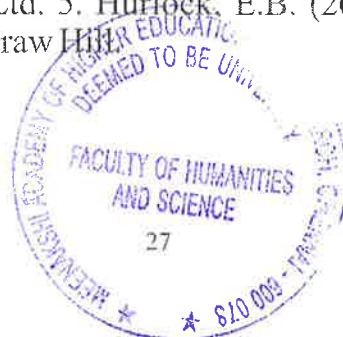
1. Definition and importance of memory. 2. Causes of forgetting. 3. How to forget (thought stopping), how to remember (techniques for improving memory) 4. The technique of passing exams. 5. The rational decision making process. 6. Improving creativity in decision making and components of creativity.


#### UNIT V: POWER OF POSITIVE THINKING

1. Thinking power- seven steps for dealing with doubt. 2. Traits of positive thinkers and high achievers, 3. Goals and techniques for positive thinking. 4. Enhancement of concentration through positive thinking. 5. Practicing a positive life style.

#### REFERENCES

1. Mile, D.J. (2004). Power of positive thinking. Delhi: Rohan Book Company. 2. Pravesh Kumar. (2005). All about self-motivation. New Delhi: Goodwill Publishing House. 3. Dudley, G.A. (2004). Double your learning power. Delhi: Konark Press. Thomas publishing Group Ltd. 4. Lorayne, H. (2004). How to develop a super power memory. Delhi: Konark Press. Thomas publishing Group Ltd. 5. Hurlock, E.B. (2006). Personality Development, 28th Reprint. New Delhi: Tata Mc Graw Hill.





PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No. 12, Vembulkarman Koil Street,  
West K.K. Nagar, Chennai-600 078.

**SYLLABUS**  
**SOFT SKILL IV**

Common for UG/ students who study (i.e. B.A.(English)/ B.Sc.(Mathematics), BBA, B.COM(GEN),(C.A),(C.S))

**SOFT SKILL – IV**  
**COMPUTING SKILLS**

**OBJECTIVE:**

The major objective in introducing the Computer Skills course is to impart training for students in Microsoft Office which has different components like MS Word, MS Excel, MS Access, Power point etc., at two levels based on their knowledge and exposure. It provides essential skills for the user to get adapted to any work environment, as most of the systems in any6 work place have MS Office installed for their day to day activities. The course is highly practice oriented rather than regular class room teaching. Pre-requisite : NIL.

**UNIT I:**

Introduction to Computers - Classification of Computers; Role of Computers in society; Inside the Computers - Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming - Overview, need for languages, skills; Networking Basics; Virus; Hacking.

**UNIT II:**

Word Processing - Open, Save and close word document; Editing text - tools, formatting, bullets; Spell Checker; Navigating in word - keyword, Mouse; document formatting - paragraph alignment, indentation, headers and footers, numbering; printing - preview, options.

**UNIT III:**

File Management - Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders - editing, retrieving, deleting, renaming, subfolders - manipulate windows - maximize, minimize; Power point basics - terminology, templates, viewing.

**UNIT IV:**

Spreadsheets - MS Excel - opening, entering text and data, formatting, navigating; Formulas - entering, handling and copying; Charts - creating, formatting and printing, header and footer, centering data, printing.


**UNIT V:**

Networks - Internet Explorer - components; www - working, browsing, searching, saving - Bookmark - favorite, create, delete - Printing a web page; email - creating, receiving, reading and sending messages. Note: Unit II to Unit V needs exposure thru practicals.

**REFERENCES:**

1. Introduction to Computers - Peter Norton, Tata McGrawHill. 2. Microsoft 2003 - Jennifer Ackerman Kettel, Guy HatDavis, Curt Simmons, Tata McGraw-Hill. EXAMINATION:  
1. Internal assessment could be based on Theory and/or practicals. 2. End semester is based on practicals.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEEHANISHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vaidhyanathan Koi Street,  
West K.K. Nagar, Chennai - 600 078

**SYLLABUS**  
**III SEMESTER**  
**ENVIRONMENTAL STUDIES**

**Common for UG/ students who study**

**(i.e. B.A.(English)/ B.Sc.(Mathematics),B.Sc(Computer Science),B.Sc(Visual Communication) BCA, BBA, B.COM(GEN),(C.A),(C.S))**

**Objective:** This course is designed

1. To enable students understand interrelationships of living organisms and their environments.
2. To enhance the knowledge and attitudes towards environment.
3. To understand the growing concern for conservation of biodiversity, prudent use of natural resources, effects of population and pollution on environment.
4. To create an awareness on the laws and ethics in environmental issues.

**Unit 1 – Introduction & Natural Resources (6 Hours)**

The multi-disciplinary nature of environmental studies – Definition, Scope and importance, Need for public awareness. Natural Resources: Renewable and non – renewable resource Used and over - exploitation of forest, water and food resources

**Unit 2 – Ecosystems (4 Hours)**

Concept of an ecosystem – structure and function of an ecosystem – producers, consumers and decomposers – Energy flow in the ecosystem and ecological pyramids

**Unit 3 – Biodiversity and its conservation (6 Hours)**

Introduction – definition: genetic, species and ecosystem diversity – Value of biodiversity – consumptive use, productive use, social, ethical, aesthetic and optional Values – India as a mega – diversity nation – Hot spot of bio-diversity – Threats to bio-diversity, habitat loss, poaching of wildlife, man wildlife conflicts.

**Unit 4 – Environmental Pollution (6 Hours)**


Definition – Causes, effects and control measures of – Air pollution, water pollution, soil pollution – solid waste management – causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution.

**Unit 5 – Social Issues and the Environment (8 Hours)**

From unsustainable to sustainable development – urban problems related to energy – water conservation, rain water harvesting, water shed management – Disaster management floods, earthquake, cyclone and landslides.

Environment ethics – issues and possible solutions – climate change, global warming, nuclear accidents and holocaust.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**SYLLABUS**  
**VALUE EDUCATION - IV**

Common for UG/ students who study

(i.e. B.A.(English)/ B.Sc.(Mathematics),B.Sc(Computer Science),  
B.Sc (Visual Communication), BCA, BBA, B.COM (GEN),(C.A),(C.S))

**UNIT-I Introduction**

Value education – Education and institution culture-cultural values. Fivefold moral culture & nonviolence personality development: submission purpose and philosophy of life (perfection).

**UNIT-II Structure in life:**

Physical structure of human body-Five factors to balance in life-Four structure in life-Introspection-Thought process.

**UNIT-III Desire and Anger:**

Moralization of desire-Neutralizations of Anger.


**UNIT-IV Human resource development:**

Eradication of worries-greatness of blessings/friendship-peace-family-peace of mind.

**UNIT-V Laws of nature:**

Unified force-cause and effect system-purity of thought and deed-genetic centre.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078



**I SEMESTER**  
**ALLIED MATHEMATICS-I**  
**(For B.Sc., Computer Science, BCA)**

**UNIT-I**

Theory of equations -Relation between roots and coefficients – Transformation of equations-Increasing and decreasing the roots of an equation-Reciprocal equation –Horner's method-Newton's method of finding roots.

**UNIT-II**

Matrices: Characteristics roots and characteristic vectors- Properties (Statements only) Cayley Hamilton theorem (Statements only) verification-To find the inverse using the above theorem –Diagonalization of a matrix and using it to find the powers of a matrix.

**UNIT-III**

Trigonometry- Expansions of  $\cos n\phi$ ,  $\sin n\phi$ ,  $\tan n\phi$ , in powers of  $\phi$ - hyperbolic functions- Inverse hyperbolic function- Real and Imaginary parts of  $\sin(\alpha + i\beta)$ ,  $\cos(\alpha + i\beta)$ ,  $\tan^{-1}(\alpha + i\beta)$

**UNIT-IV**

Multiple integrals- Application of double integral- Integral in evaluating area between curves- Evaluation of triple integrals – Jacobian of two and three variables- Beta and Gamma functions-Relation- Evaluation of double and triple integrals using Beta and Gamma functions.


**UNIT-V**

Fourier Series- Definition- Finding Fourier coefficients for a given periodic function with period  $2\pi$  - Odd and Even function- Half Range series.

**Books for Reference:**

1. S. Narayanan and T.K. Manickavachagam Pillai – Ancillary Mathematics, S. Viswanathan Printers, 1986, Chennai.
2. P. Kandasamy and K.Thilagavathi , Allied Mathematics Volume I and II-2004, S.Chand and Co., New Delhi.
3. Ancillary Mathematics Volume I and II by P. Balasubramanian & K.G.Subramanian.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembuliamman Koil Street,  
West K.K. Nagar, Chennai-600 078

**II SEMESTER**  
**ALLIED- MATHEMATICS-II**  
**(For B.Sc., Computer Science and BCA)**

**UNIT-I**

Differential equation of the form  $(aD^2+bD+C)y = e^{ax} \phi(x)$  where a, b, c are constants,  $\phi(x) = \sin mx$  (or)  $\cos mx$  (or)  $x^m$ . Solution of homogeneous linear differential equations of the form  $(ax^2D^2+bxD+C)y = X$ , where x is a function of x – variation of parameters.

**UNIT II**

Formation of Partial differential equations by eliminating arbitrary constants and arbitrary function – Solutions of standard types of first order equations –  $f(p,q) = 0$ ;  $p(x,p,q) = 0$ ,  $f(y,p,q) = 0$ ,  $f(z,p,q) = 0$ ,  $z = px+qy+f(p,q)$  – Charpit's method (Problem Only) Lagrange method of solving linear partial differential equation  $Pp+Qq+R$ .

**UNIT III**

Vector Calculus – Scalar and Vector point function, Differentiation of Vectors, Differential operators, Directional Derivative, gradient, Divergence and curl.

**UNIT IV**

Integration of Vectors : Line, Surface and Volume Integrals. Theorems of Gauss, Green, Stokes theorems (Statement Only) Verification Simple Problems.


**UNIT V**

Laplace transformation : Definition – Laplace Transform of  $e^{at}$ ,  $\cos at$ ,  $\sin at$ ,  $\cosh at$ ,  $\sinh at$ ,  $t^n$ , n-a Positive integer –  $e^{at} f(t)$ ,  $t^n f(t)$ ,  $f'(t)$ ,  $f''(t)$  – Inverse Laplace Transform – Solving differential equation of second order with constant coefficients using Laplace Transform – Solving simultaneous equations using Laplace Transform.

**Books for Reference :**

1. S. Narayanan and T.K. Manickavasagam Pillai – Ancillary Mathematics, S. Viswanathan Printers, 1986, Chennai.
2. P. Kandasamy and K. Thilagavathi, Allied Mathematics Volume I and Volume II – 2004, S. Chand and Co., New Delhi.
3. Ancillary mathematics Volume 1 and 2 by P. Balasubramanian & K. G. Subramanian.



  
PRINCIPAL  
FACULTY OF HUMANITIES & SCIENCE  
MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University)  
No: 12, Vembulianman Koil Street,  
West K.K. Nagar, Chennai-600 078.