# DEPARTMENT OF COMPUTER APPLICATIONS :: VRSEC

VRSEC/MCA/AUTONOMOUS/2021

Date: 10-12-2021
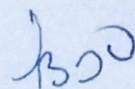
## MEETING NOTICE

**Sub**: VRSEC - Department of Computer Applications (MCA) Board of Studies meeting at 2:00 PM on 14-12-2021through ONLINE & OFFLINE mode.

I cordially invite you to attend the Board of Studies meeting being convened at 2.00 PM on 14-12-2021 through ONLINE & OFFLINE mode.

<u>Agenda:</u>

1. To discuss and approve the revised scheme of instruction for III & IV Semesters of MCA20 Regulations.
2. To discuss and approve the syllabus of III Semester and IV Semester of MCA20 Regulations.
3. To discuss and approve the IV Semester MOOCs Courses of MCA20 Regulations under Elective-III.
4. To approve the VI Semester Scheme of instruction of MCA19 Regulations.
5. Amendments in MCA20 Regulations.
6. Any other point with the permission of the Chair.

Dr. B. D. C. N. Prasad
Chairman, Board of Studies and
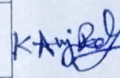Head, Dept. of Computer Applications

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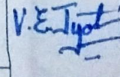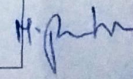
All the members of Board of Studies - MCA

# DEPARTMENT OF COMPUTER APPLICATIONS
## Velagapudi Ramakrishna Siddhartha Engineering College
### (Autonomous)
### Vijayawada – 520 007

Minutes of the **Meeting of the Board of Studies** (virtual and offline) held at 2:00 P.M. on **14-12-2021 i.e. Tuesday** (2021-22 Academic Year).

Dr.B.D.C.N.Prasad, Head of the Department & Chairman, Board of Studies, chaired the meeting and extended a warm welcome to the members present.

**Members Participated:**

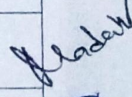| | | | |
|---|---|---|---|
| 1. | Dr. B.D.C.N Prasad<br>Professor & HOD,<br>Department of Computer Applications, VRSEC | Chairman | |
| 2. | Dr. S. Ravi Chandra<br>Associate Professor,<br>Department of Computer Science and Engineering,<br>NIT Warangal | Subject Expert | |
| 3. | Dr. E. Srinivasa Reddy<br>Professor & Principal,<br>Dr. Y.S.R. ANU College of Engineering & Technology,<br>Acharya Nagarjuna University | Subject Expert | |
| 4. | Mr. K. Anji Reddy<br>Sr. Asst. Professor of MCA | Member | |
| 5. | Mr. B. Srinivas<br>Asst. Professor of MCA | Member | |
| 6. | Dr. K. Parish Venkata Kumar<br>Asst. Professor of MCA | Member | |
| 7. | Mr. J. Hari Krishna<br>Asst. Professor of MCA | Member | |
| 8. | Mrs. B. Lakshmi<br>Asst. Professor of MCA | Member | |
| 9. | Mr. R. Madhukanth<br>Asst. Professor of MCA | Member | |
| 10. | Mr. R. Rama Krishna<br>Asst. Professor of MCA | Member | |
| 11. | Dr. V. Esther Jyothi<br>Asst. Professor of MCA | Member | |
| 12. | Mrs. M. Prasanna Lakshmi<br>Asst. Professor of MCA | Member | |

The following agenda items were discussed and deliberated upon

**Item-1.** To discuss and approve the revised scheme of instruction for III & IV Semesters of MCA20 Regulations.

Dr.B.D.C.N.Prasad, HOD presented the revised scheme of instruction for III and IV semesters of MCA20 Regulations with the following changes corresponding to the scheme of instruction for III and IV semesters of MCA20 Regulations approved in the previous BOS meeting dated 12-11-2020:

(i) In order to gain vast industrial exposure as a part of Major Project, it has been proposed to offer only one elective course in final semester i.e., Semester IV.

(ii) In connection to the above (i), there has been a change in the total number of credits for Semester IV of MCA20 Regulations. Previously it was 18 credits and now it is 15 credits. Finally, this change in the total number of credits for MCA20 Regulations has been proposed for approval.

### Scheme of Instruction of MCA III & IV Semesters (MCA20 Regulations) approved in the BOS meeting dated 12-11-2020

#### SEMESTER – III

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|-------------|---------------|---|---|---|---|----|----|----|
| 1 | 20MCA2301 | Advanced Java Programming | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 2 | 20MCA2302 | Program Elective - II | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 3 | 20MCA2303 | Program Elective - III | 3 | - | - | 3 | 40 | 60 | 100 |
| 4 | 20MCA2304 | Industrial Management | 3 | - | - | 3 | 40 | 60 | 100 |
| 5 | 20MCA2305 | Cloud Computing | 3 | - | - | 3 | 40 | 60 | 100 |
| 6 | 20MCA2351 | Advanced Java Programming Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 7 | 20MCA2352 | Program Elective - II  Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 8 | 20MCA3353 | Mini Project | - | - | 3 | 1.5 | 40 | 60 | 100 |
| | | | 15 | 2 | 9 | 21.5 | 320 | 480 | 800 |

#### SEMESTER – IV

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|-------------|---------------|---|---|---|---|----|----|----|
| 1 | 20MCA2401 | Program Elective - IV | 3 | - | - | 3 | 40 | 60 | 100 |
| 2 | 20MCA2402 | Program Elective - V | 3 | - | - | 3 | 40 | 60 | 100 |
| 3 | 20MCA3453 | Major Project | - | - | 24 | 12 | 40 | 60 | 100 |
| | | | 6 | - | 24 | 18 | 120 | 180 | 300 |

## Revised Scheme of Instruction of MCA III & IV Semesters (MCA20 Regulations)

### SEMESTER – III

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 20MCA2301 | Machine Learning | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 2 | 20MCA2302 | Cyber Security | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 3 | 20MCA2303 | **Program Elective – II** | 3 | - | - | 3 | 40 | 60 | 100 |
| 4 | 20MCA2304 | Industrial Management | 3 | - | - | 3 | 40 | 60 | 100 |
| 5 | 20MCA2305 | Big Data Analytics | 3 | - | - | 3 | 40 | 60 | 100 |
| 6 | 20MCA2351 | Machine Learning with Python Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 7 | 20MCA2352 | Advanced Java Programming Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 8 | 20MCA3353 | Mini Project | - | - | 3 | 1.5 | 40 | 60 | 100 |
| | | | 15 | 2 | 9 | **21.5** | 320 | 480 | 800 |

Program Elective – II
20MCA2303A: Computer Graphics
20MCA2303B: Distributed Systems
20MCA2303C: Advanced Database Technology
20MCA2303D: Human Computer Interaction

### SEMESTER – IV

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 20MCA2401 | Program Elective – III | 3 | - | - | 3 | 40 | 60 | 100 |
| 2 | 20MCA3451 | Major Project | - | - | 24 | 12 | 40 | 60 | 100 |
| | | | 3 | - | 24 | 15 | 80 | 120 | 200 |

Program Elective – III
20MCA2401A: Software Testing Methodologies
20MCA2401B: Angular JS
20MCA2401C: Cloud Computing
20MCA2401D: Any other MOOCS course offered by the department

> ✓ **After thorough discussions the Board of Studies unanimously approved the revised Scheme of Instruction for III & IV Semesters and the change in the total number of credits for MCA20 Regulations.**

**Item-2.** To discuss and approve the syllabus of III Semester and IV Semester of MCA20 Regulations.

Dr.B.D.C.N.Prasad, HOD presented the syllabus of III Semester and IV Semester courses w.e.f., 2021-22 of MCA20 Regulations.

✓ **The Board of Studies unanimously approved the Curriculum for III & IV Semesters w.e.f. 2021-22 of MCA20 Regulations presented by Head of the Department.**

**Item-3.** To discuss and approve the IV Semester MOOCs Courses of MCA20 Regulation under Elective-III.

Dr.B.D.C.N.Prasad, HOD presented the following 12-weeks MOOCs Courses offered by SWAYAM NPTEL (during January-April, 2022) for Elective-III in Semester IV of MCA20 Regulations:

20MCA2401D1: Data Analytics with Python
20MCA2401D2: Object Oriented System Development using UML, Java and Patterns
20MCA2401D3: Introduction to Internet of Things
20MCA2401D4: Deep Learning
20MCA2401D5: Blockchain and its Applications
20MCA2401D6: Computer Architecture

✓ **The Board of Studies unanimously approved the 12-weeks MOOCs Courses offered by SWAYAM NPTEL (during January-April, 2022) for Elective-III in Semester IV of MCA20 Regulations presented by Head of the Department.**

**Item-4. To approve the VI Semester Scheme of instruction of MCA19 Regulations.**

Dr.B.D.C.N.Prasad, HOD presented the following VI Semester Scheme of Instruction of MCA19 Regulations.
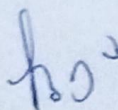
| S.No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|-------|-------------|---------------|---|---|---|---|----|----|----|
| 1 | 19MCA4651 | Major Project | - | - | 24 | 12 | 40 | 60 | 100 |
|  |  |  | - | - | 24 | 12 | 40 | 60 | 100 |

L: Lecture    T: Tutorial      P: Practical      C: Credits
CE: Continuous Evaluation    SE: Semester End Evaluation   Tot: Total Marks

✓ **The Board of Studies unanimously approved the VI Semester Scheme of instruction of MCA19 Regulations presented by Head of the Department.**

**Item-5. Amendments in MCA20 Regulations**

The total number of **credits for MCA20 Regulations is revised to 80** as it has been approved by the Board under Item-1 of the agenda for discussion.

Dr. B. D. C. N. Prasad
Chairman, Board of Studies and
Head, Dept. of Computer Applications

# V.R.SIDDHATHA ENGINEERING COLLEGE

## DEPARTMENT OF COMPUTER APPLICATIONS

### Scheme of Instruction( MCA20 Regulation)

| Semester | Number of Credits |
|----------|-------------------|
| I | 21.5 |
| II | 22 |
| III | 21.5 |
| IV | 15 |
| Total Credits | 80 |

## SEMESTER – I

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|--------------|---------------|---|---|---|---|----|----|----|
| 1 | 20MCA2101 | Data Structures | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 2 | 20MCA2102 | Database Management Systems | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 3 | 20MCA1103 | Discrete Mathematics | 3 | - | - | 3 | 40 | 60 | 100 |
| 4 | 20MCA2104 | Computer Networks | 3 | - | - | 3 | 40 | 60 | 100 |
| 5 | 20MCA2105 | Operating Systems | 3 | - | - | 3 | 40 | 60 | 100 |
| 6 | 20MCA2151 | Data Structures Using C Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 7 | 20MCA2152 | Database Management Systems Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 8 | 20MCA1153 | Professional Communication Skills Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 9 | 20MCA4154 | Personality Development Course (Logical Reasoning and English for Professionals) | - | - | 2 | 0 | 100 | - | 100 |
| | | | 15 | 2 | 11 | 21.5 | 420 | 480 | 900 |

L: Lecture          T: Tutorial          P: Practical          C: Credits
CE: Continuous Evaluation          SE: Semester End Evaluation          Tot: Total Marks

**VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE: VIJAYAWADA - 7**

Head
Department of Computer Applications
V.R. Siddhartha Engineering College
Kanuru, VIJAYAWADA-520 007

# SEMESTER – II

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|--------------|---------------|---|---|---|---|----|----|-----|
| 1 | 20MCA2201 | Python Programming | 3 | - | - | 3 | 40 | 60 | 100 |
| 2 | 20MCA2202 | Object Oriented Programming through Java | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 3 | 20MCA2203 | Software Engineering | 3 | - | - | 3 | 40 | 60 | 100 |
| 4 | 20MCA2204 | Data Mining | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 5 | 20MCA2205 | Program Elective – I<br><br>A: Design and analysis of Algorithms<br>B: Artificial Intelligence<br>C: Cryptography & Network Security<br>D: Information Retrieval Systems | 3 | - | - | 3 | 40 | 60 | 100 |
| 6 | 20MCA2251 | Python Programming Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 7 | 20MCA2252 | Object Oriented Programming Through Java Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 8 | 20MCA2253 | Statistics with R Programming Lab | - | 1 | 2 | 2 | 40 | 60 | 100 |
| 9 | 20MCA4254 | Personality Development Course (Aptitude and Campus Recruitment Training) | - | - | 2 | 0 | 100 | - | 100 |
| | | | 15 | 3 | 10 | 22 | 420 | 480 | 900 |

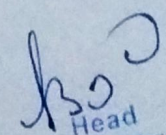**L**: Lecture      **T**: Tutorial      **P**: Practical      **C**: Credits
**CE**: Continuous Evaluation      **SE**: Semester End Evaluation      **Tot**: Total Marks

Head
Department of Computer Applications
V. Siddhartha Engineering College
VIJAYAWADA-520 007.

**VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE: VIJAYAWADA - 7**

## SEMESTER – III

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|--------------|---------------|---|---|---|---|----|----|-----|
| 1 | 20MCA2301 | Machine Learning | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 2 | 20MCA2302 | Cyber Security | 3 | 1 | - | 4 | 40 | 60 | 100 |
| 3 | 20MCA2303 | **Program Elective – II** | 3 | - | - | 3 | 40 | 60 | 100 |
| 4 | 20MCA2304 | Industrial Management | 3 | - | - | 3 | 40 | 60 | 100 |
| 5 | 20MCA2305 | Big Data Analytics | 3 | - | - | 3 | 40 | 60 | 100 |
| 6 | 20MCA2351 | Machine Learning with Python Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 7 | 20MCA2352 | Advanced Java Programming Lab | - | - | 3 | 1.5 | 40 | 60 | 100 |
| 8 | 20MCA3353 | Mini Project | - | - | 3 | 1.5 | 40 | 60 | 100 |
| | | | 15 | 2 | 9 | **21.5** | 320 | 480 | 800 |

### Program Elective – II

20MCA2303A: Computer Graphics
20MCA2303B: Distributed Systems
20MCA2303C: Advanced Database Technology
20MCA2303D: Human Computer Interaction

## SEMESTER – IV

| S. No. | Subject Code | Subject Title | L | T | P | C | CE | SE | Tot |
|--------|--------------|---------------|---|---|---|---|----|----|-----|
| 1 | 20MCA2401 | **Program Elective - III** | 3 | - | - | 3 | 40 | 60 | 100 |
| 2 | 20MCA3451 | Major Project | - | - | 24 | 12 | 40 | 60 | 100 |
| | | | 3 | - | 24 | **15** | 80 | 120 | 200 |

### Program Elective – III

20MCA2401A: Software Testing Methodologies
20MCA2401B: Angular JS
20MCA2401C: Cloud Computing
20MCA2401D: Any other MOOCS course offered by the department

Head
Department of Computer Applications
R. Siddhartha Engineering College
520 007

**L**: Lecture          **T**: Tutorial                **P**: Practical          **C**: Credits
**CE**: Continuous Evaluation      **SE**: Semester End Evaluation          **Tot**: Total Marks

**VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE: VIJAYAWADA - 7**