

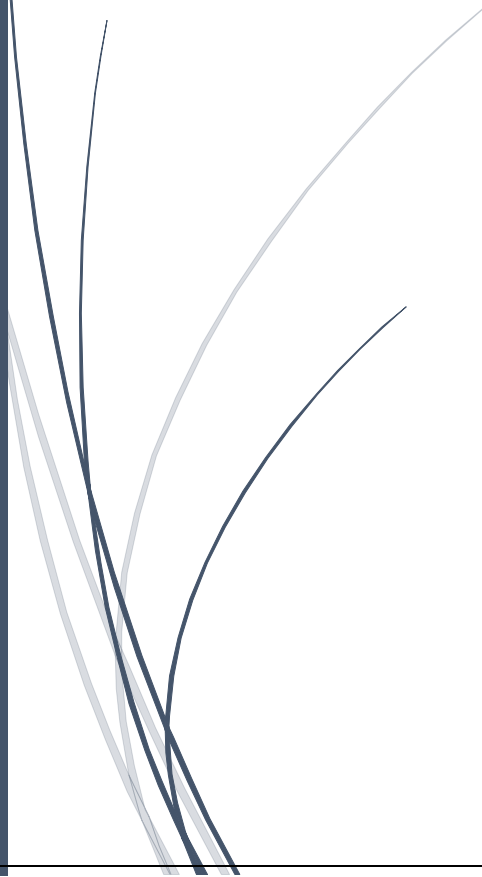
A dark blue vertical bar is on the left. A blue arrow points right from it, containing the text 'MCA'.

MCA

Programme Handbook
MCA (Master of Computer Applications)

School of Engineering & Technology
Sushant University

(*Applicable to students admitted in the academic year 2024- 2025)

Several thin, curved lines in shades of blue and grey sweep upwards from the bottom left corner.

Programme Handbook

Master of Computer Applications

(*Applicable to students admitted in the academic year 2024- 2025)

PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this document, unless the context otherwise requires:

1. **“Programme”** means Degree Programme, that is MCA. Degree Programme.
2. **“Course”** means a theory or practical subject that is normally studied in a semester, like Introduction to Python programming, Machine Learning etc.
3. **“Director, Academic Affairs”** means the authority of the University who is responsible for all academic activities of the Academic Programmes for implementation of relevant rules of this Regulations pertaining to the Academic Programmes.
4. **“Dean/Director”** means head of the School concerned.
5. **“PD”** means Programme Director of the respective programme of the School concerned.
6. **“Controller of Examinations (COE)”** means the authority of the University who is responsible for all activities of the University Examinations.
7. **“SU/ University”** means Sushant University (Erstwhile Ansal University)
8. **“MSE”**- Mid-Semester Evaluation, **“ESE”**- End Semester Examination, **“SGPA”**- Semester Grade Point Average, **“CGPA”**- Cumulative Grade Point Average, **“TDCC”**- Trans Disciplinary Course Certificate

Index

S.No	Content	Page no.
1	ADMISSION	1
2	STRUCTURE OF PROGRAMME	1
3	ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER	4
4	FACULTY MENTOR	5
5	PROGRAMME COMMITTEE	5
6	COURSE COMMITTEE FOR COMMON COURSES	6
7	EXAMINATION SYSTEM	7
8	PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT	8
9	EXAM REGULATIONS	9
10	PROVISION FOR AUTHORISED BREAK OF STUDY	14
11	DISCIPLINE	14
12	REVISION OF REGULATIONS, CURRICULUM AND SYLLABI	14
13	EXTRA/ CO-CURRICULAR ACTIVITIES OF THE SCHOOL	14
14	PROGRAMME STRUCTURE OF THE RESPECTIVE PROGRAM	15
15	APPENDIX A- COURSE DESCRIPTION (Separate document attached)	

1. ADMISSION

1.1. Candidates seeking admission to the first semester of the four semester MCA Degree Programme: Should have Bachelor's degree in BCA or equivalent in the relevant field. Obtained at least 55% marks in the Bachelor's degree with valid GATE score. Candidates, who do not have valid GATE score, will have to take Sushant University Entrance Exam (AUEE).

1.2. Lateral entry admission

There is no provision of Lateral entry in MCA.

1.3. Migration/Transfer of candidates from another University approved by UGC shall be granted as per the approval of the School level lateral admissions and Migration Committee (LAMC)

1.4. All Migration/Transfers are subject to the approval of the Vice Chancellor of SU.

2. STRUCTURE OF PROGRAMME

2.1 Credits requirement:

Minimum credit requirement is 72 credits for a student to be eligible to get Post Graduate in engineering.

2.2 Categorization of courses:

MCA Programme will have a curriculum with syllabi consisting of theory and courses that shall be categorized as follows:

S. No.	Category	Suggested breakup of Credits (Total 74)
1	Core Courses	28
2	Discipline Specific Electives (DSE)	-
3	Generic Elective I (GE I)	-
4	Generic Elective II (GE II)	25
5	Dissertation or Internship	16
6	Skill Enhancement Course (SEC)	5
7	Ability Enhancement Course (AEC)	-
8	Service Learning/Community Service Based Course	-
	Total	74

2.3 Induction Programme

2.3.1. An induction programme with two weeks' duration will be conducted before the commencement of I semester class as per the school curriculum or preference. The following physical activities shall be completed during the induction programme.

I. Physical fitness and Health

- Physical fitness Activities
- Sports/Games Related

II. Culture

- Learning an art form
- Heritage
- Intangible Cultural Heritage

III. Literature & Media

- Literature, Cinema and Media
- Group reading of classics

IV. Social Service

- Social Awareness
- Social Service

V. Self-Development

- Spiritual, Mindfulness & Meditation
- Religion and Inter-faith
- Human Values
- Behavioural and Interpersonal skills
- Lectures

VI. Nature

- Nature Club
- Environment Protection (non-credit course)

VII. Innovation

2.3.2. Other Courses

- Constitution of India
- Universal Human Values
- Indian Traditional Knowledge
- Learning an art form

2.4. Bridge Courses:

The bridge courses are offered before the commencement of semester-1 along with the Induction program. In combination it is a total four weeks' course

- Introduction to all Basic Prerequisite for MCA -1 Modules with 8 Lectures
- Soft Skills -1 Module with 8 Lectures

2.5. Number of courses per Semester:

Each semester curriculum shall normally have a blend of lecture courses not exceeding 20 credits and Laboratory courses and Employability Enhancement Course(s) not exceeding 5 credits. Each Employability Enhancement (EE) Courses may have credits assigned as per curriculum.

2.6 Credit Assignment: Each course is assigned certain number of credits based on the following:

Contact period per week	Credits
1 Lecture period	1
1 Tutorial Periods	1
2 Laboratory Periods (also for EE Courses like Seminar/project work/case study/etc.)	1

2.7 Industrial Training / Internship

2.7.1. The students may undergo Industrial training for a period (6-8 Weeks) as specified in the Curriculum during summer / winter vacation. In this case the training has to be undergone continuously for the entire period.

2.7.2.

The students may undergo Internship at Research organization University/Industry

(after due approval from the Dean/Director) for the period prescribed in the curriculum during summer / winter vacation, in lieu of Industrial training. The students shall be permitted to carry out their internship between 3rd and 4th Semester. The report of which under the industry as well as faculty mentor to be submitted and presented in 4th Semester.

2.8. Industrial Visit:

The student may go for Industrial Visit as per the requirement..

2.9. Massive Open Online Courses:

Students may be permitted to credit one online course under Massive Open Online Course (which are provided with certificate) subject to a maximum of two credits. The approved list of online courses will be provided by the concerned department from portals like Swayam, NPTEL, edX, Udemy before the commencement of every semester. The credit attained through MOOC course has to be transferred to the mark sheet of their respective semester and will be a compulsory course to meet the programme requirements. In a scenario, where the complete assessment is not done by the MOOC platform the School may conduct its own exam for evaluation of the respective course. The details regarding online courses taken up by students should be sent to the Controller of Examinations one month before the commencement of End Semester Examination.

2.10. Medium of Instruction:

The medium of instruction is English for all courses, examinations, seminar presentations and project / thesis / dissertation reports.

3. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

3.1. A student who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as Medical / participation in sports, the student is expected to attend at least 75% of the classes.

Therefore, **he/she shall secure not less than 75%** (after rounding off to the nearest integer) of overall attendance.

3.2. However, a student who secures attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events may be permitted to appear for the current semester examinations subject to the condition that the student shall submit the medical certificate/ sports participation certificate attested by the Dean/Director. The same, after approval of the VC shall be forwarded to the Controller of Examinations for record purposes.

3.3. Except special circumstances as mentioned in clause 3.2, students who secure less than 75% attendance in all the courses of the semester and students who do not satisfy the other requirements as specified by their respective programme shall not be permitted to write the University examination at the end of the semester. They are required to repeat the incomplete semester in the summer exams, as per the norms prescribed and duly notified by the Controller of Examinations.

4. FACULTY MENTOR

To help the students in planning their courses of study and for general advice on the academic programme, the Dean/Director of the Department will attach a certain number of students to a teacher of the Department who shall function as Faculty mentor for those students throughout their period of study. The Faculty Mentor shall advise the students in registering and reappearance registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Mentor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities for the faculty mentor shall be:

- To act as the channel of communication between the Dean/Director and the students of the respective group.
- To collect and maintain various statistical details of students.
- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide student enrolment and registration of the courses.
- To authorize the final registration of the courses at the beginning of each semester.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.

5. PROGRAMME COMMITTEE

5.1. Every Programme shall have a Programme Committee consisting of teachers of the programme concerned, student representatives and chaired by the Dean/Director. It is like a 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching-learning process. The functions of the Programme committee include-

- Solving problems experienced by students in the class room and in the laboratories.
- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives, the details of regulations regarding weightage

used for each assessment. In the case of practical courses (laboratory/ project work / seminar etc.) the breakup of marks for each exercise / module of work, should be clearly discussed in the Programme committee meeting and informed to the students.

- Analysing the performance of the students of the respective Programme after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

5.2. The Programme committee shall be constituted within the first week of each semester by the Dean/Director.

5.3. At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the Programme committee depending upon the strength of the programme.

5.4. The Chairperson of the programme committee may invite the Faculty mentor(s) if required to the programme committee meeting.

5.5. The Programme Director is required to prepare the minutes of every meeting, submit the same to Dean/Director within two days of the meeting and arrange to circulate it among the students and faculty members concerned.

5.6. The first meeting of the Programme committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the regulations. Two or three subsequent meetings shall be held in a semester at suitable intervals. The Programme Committee shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details. During these meetings the student members representing the respective class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

6. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a “Course Committee” comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Dean/Director depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The ‘Course committee’ shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the internal assessment test(s).

7. EXAMINATION SYSTEM

7.1. The academic performance of students is adjudged by the aggregate of continuous mid Semester Evaluation (MSE) and the End Semester Examination (ESE).

7.2. Each course, both theory and practical (including project work & viva voce Examinations) shall be evaluated for a maximum of 100 marks.

- The weightage of End Semester Examination (ESE) to Mid Semester Evaluation (MSE) of all courses are 60% to 40%.
- The weightage of End Semester Examination (ESE) to Mid Semester Evaluation (MSE) of TDCC/Soft-Skills courses are 40% to 60%.

7.3. Industrial training and seminar shall be part of the course concerned.

7.4. The University examination (theory and practical) of 2 hours' duration shall ordinarily be conducted twice in December and May for Odd and Even semester respectively. **End Semester Examination question paper pattern is given below:**

A question paper for theory examinations of a course unit of any programme will be of 2 hours' duration with maximum marks 60/50 (weightage 60%) and will have three parts; Part A, Part-B and Part-C. (The duration of practical examinations will be as required and the value addition courses will have different format).

Part-A: 28 Marks (students are advised to devote approximately 50 minutes to 60 minutes out of total 2 hours on this part)

In this section, a student is required to answer 4 out of 5 given questions. Each question will be of 7 marks. These questions may include short numerical problems or theory questions to assess students' understanding of concepts and frameworks.

If needed in this part, a question might be designed to have maximum two sub- parts (a) and (b) with weightage of 3 and 4 or 4 and 3 marks respectively to enable testing on more concepts and frameworks.

Part-B: 20 Marks (students are advised to devote approximately 30 minutes to 40 minutes out of total 2 hours on this part)

In this part, a student is required to answer any 2 out of 3 given questions. Each question will have a weightage of 10 marks and may include long theory questions or numerical problems requiring students to apply the concepts to a given situation or in a given context and analyse a situation.

If a faculty feels that a question in this section needs to have sub-parts, there may be maximum two sub- parts provided that sub-part (a) involves understanding of a concept through a

numerical or a theory question and sub- part (b) is application/ analysis of the concept used in sub-part (a).

Part-C: 12 Marks (students are advised to devote approximately 20 to 30 minutes out of total 2 hours on this part)

This part will be compulsory without any choice and will have a weightage of 12 marks. This may be a case study, a hypothetical problem or a situation seeking a possible solution(s), students' response to a situation based on general awareness of the broad discipline of study etc. The objective is not only to judge the skills of students to apply the concept to a particular situation or context but also to assess his/her analytical ability and how a student make realistic assumptions and can ascribe meaning to data (given in the question paper or to be assumed). The students will also be tested on integrative and evaluative skills by making them apply more than one concept together in a given situation or the context.

7.5. The University examination for project work/dissertation shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding X students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

7.6. For the University examination in both theory and practical courses including project work/Dissertation the internal and external examiners shall be appointed by the Dean/Director in consultation with the Controller of Examinations.

8. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

8.1. Internal Assessment: For all theory and practical courses, the distribution of marks for various **components for the Internal Assessment** is shown below in the table:

8.1.1 For a course of 100 marks containing only Theory Component

Mid Semester Examination	Quiz(s)/ Presentation (s)	Assignment(s)	Total
15	15	10	40

8.1.2. For a course of 100 marks containing only Lab Component

Mid Semester Examination	Lab/ practical performed & Lab report	Assignment(s)/ Quiz (s)	Total
15	15	10	40

8.1.3. For a course of 100 marks containing both theory and Lab Component:

MID SEMESTER EVALUATION (40) – Theory (30 Marks) + Lab (10 Marks)

MID SEMESTER EVALUATION (30) Theory (20 Marks) + Lab (10 Marks)			
Theory (30)			
Mid Semester Examination	Quiz(s)/ Presentation (s)/Assignment	Attendance	Total
15	10	5	30
Lab (10)			
Mid Semester Examination	Lab/ practical performed & Lab report	Total	
5	5	15	
END SEMESTER EXAMINATION (60)			
Theory (40)		Lab (20) (Lab Practical performed-10, Viva Voce-5, Lab Report-5)	

8.2. Internship/Project Work

8.2.1. Here the Internal Assessment based on project prepared and submitted will be 40 and the External Assessment based on Viva-voce/presentation will 60 or vice-versa as per the school preference

8.2.2. If a student fails to submit the project report on or before the specified deadline, he/ she is deemed to have failed in the Project Work and shall re-register for the same in a subsequent semester.

8.3. Seminar Papers:

The Seminar Paper/ Term Paper is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 1 research paper in conference/ journal. The three-member committee appointed by the Dean will evaluate the paper and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).

8.4. Attendance and Assessment Record: Every teacher is required to upload on ERP the 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project workclass, the test marks and the record of class work (topic covered), separately for each course. The teacher is also expected to safely keep excel of the attendance and the assessments. The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

9. EXAM REGULATIONS

9.1. Requirements for appearing for End Semester Examinations- A student shall normally be permitted to appear for the End Semester Examinations for all the courses registered in the

current semester (vide clause 9.10) if he/she has satisfied the semester completion requirements.

9.2. The students will be graded under absolute 10-point **Grading Scheme** as given below:

Grade	Range	Grade Point Attached
O	≥ 95	10
A+	≥ 85	9
A	≥ 75	8
B+	≥ 70	7
B	≥ 60	6
C	≥ 50	5
D	≥ 40	4
F	< 40	0
AB	—	0

9.3. Passing Criterion: A student has to fulfil the following conditions to pass any academic programme:

- A student should earn minimum “D” grade in all courses separately. However, he/she can improve his/her grade (“D” grade onwards) by re-appearing.
- To pass a course, student must obtain 40% marks in the aggregate of Mid Semester Evaluation (MSE) & End Semester Examination (ESE). In order to pass a particular course, student must appear in the Final examination irrespective of the marks obtained in the Mid Semester Evaluation.
- For successful completion of a programme, the student should secure a minimum Cumulative Grade Point Average (CGPA) of 4.0 at the end of final year of the Programme.

9.4. Promotion to Next Year

The promotion rules are applicable only for MCA program as under:

- The students will not be debarred from going to the 2nd year, irrespective of their result of the 1st year. Finally, the students will become eligible to earn the degree only if they fulfil the passing criterion.

9.5. Exam Duration: All End Semester Examinations (ESE) would be of two hours’ duration unless specified otherwise.

9.6. Re-Appearing: There is a provision for re-appearing in the examination (without attending the course-work again) for a course. Re-appearing in examination will be in following cases:

1. A student who fails to meet passing criteria in a course shall be eligible to re-appear in the examination of such course as and when scheduled, with a view to improve the performance.
2. A student who fails to appear in the examination shall be eligible to subsequently re-appear in the examination when scheduled for next batch of students.
3. The latest result obtained by the student in re-appear courses is considered as final and same will be considered for calculating his/her SGPA and CGPA.
4. There is no provision of re-appear in the Mid Semester Evaluation (MSE). **Students who have not passed a course need to take the re-appear of the End Semester Examination (ESE). The previous internal marks shall be carried forward.**
5. A student who has to re-appear in ESE in terms of provisions made above shall be examined as per the syllabus in the scheme of teaching applicable at the time of his/her joining the concerned programme. However, in cases where only some minor modifications have been made in the syllabus of the course(s) and the Dean/Director of the concerned Department certifies the same, the examination may be held in accordance with the revised syllabus.

9.7. Improvement of Score

- If a student has poor performance in number of courses in a particular term, he may at his option, take only one academic break for one year, and re-register for both the semesters of that academic year in the next academic year on payment of prescribed fee. Such a student may have the option of repeating any or all the courses in the semester(s) and retain the credits already earned by him in other course(s).
- A student shall be allowed to improve his SGPA and CGPA by re-appearing in the Examination(s) in the Courses of his choice when these examinations are held in normal schedule in which case his Mid Semester Evaluation (MSE) shall be carried forward. However, permission will not be granted to improve internal assessment. The best of the marks obtained in that subject(s) shall be taken into consideration for calculating the SGPA and CGPA and eligibility for award of a degree.
- A student, who has failed to meet the passing criteria (required CGPA), have the option to re-appear in the Final Examination (End Semester Examination) of those courses in which he/she desires to improve his/her performance in order to secure the minimum CGPA, when these examinations are scheduled for next batch of students. **Improvement is only possible in courses which have a written theory exam component in the ESE (VIVA, Jury and submission-based ESE cannot be taken for improvement).**

- Improvement in the score of courses completed by a student prior to his lateral entry in the University shall not be allowed.

9.8. Methods for Redressal of Grievances in Evaluation

Re-Checking/Re-Evaluation of Answer Books of ESE:

1. Student is entitled to ask for re-checking or re-evaluation of any of his/her paper(s) on the payment of prescribed fee within the stipulated time as notified by the Controller of Examinations.
2. If the re-evaluated/ re-checked marks are less than the earlier obtained marks, the same less marks will be treated as final.

9.9. Disciplinary Control of Students in Examinations

1. The student shall maintain proper discipline and orderly conduct during the examinations. They shall not make use of any unfair or dishonest means or indulge in disorderly conduct in the examinations.
2. No student will be allowed to appear in the Examination unless he/she is carrying his/her **ID Card and Admit Card during End Semester Examination**. All the students reappearing in End Term Examination will be allowed with the valid admit card.
3. If a student is found in possession of written/printed matter related to the subject of examination on anything (such as mobile phone, piece of paper or cloth, scribbling pad etc.), other than the answer book, any other response sheet specifically provided by the University to the students, it will be treated as act of unfair means and such cases will be forwarded to Unfair Means Committee.

9.10. Duration of the Programme: The minimum period required for completion of a programme shall be as specified in the Scheme of Teaching and Examination and Syllabi for concerned programme approved by the Academic Council on the recommendations of the Board of Studies.

The maximum number of years within which a student must pass the credit requirements for award of a degree is as follows:

For 2 years Programs = n+1 years

The maximum permissible period includes, academic break, if availed by the student.

9.11. Grade sheet: After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- The list of courses registered during the semester and the grade scored.

- The Grade Point Average (GPA) for the semester.

The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards would be shown on the final semester grad sheet.

The Semester performance of a student is indicated as “Semester Grade Point Average (SGPA)”. The SGPA is weighted average of Grade Points of all letter grades awarded to a student for all the Courses in the semester. The formula for Computing SGPA is given below:

$$SGPA = \frac{\text{Grade points secured in the Semester}}{\text{Associated credits in the Semester}}$$

The overall performance of a student in all the previous Semester(s) including the current Semester is indicated as “Cumulative Grade Point Average (CGPA)”. The Cumulative Grade Point Average (CGPA) is the weighted average of grade points of all letter grades awarded to a student for all the courses in the previous Semester(s) including the current Semester. The formula for computing CGPA is given below:

$$CGPA = \frac{\text{Cumulative Grade points secured in all the previous Semester(s) including the Current Semester}}{\text{Associated credits in the previous Semester(s) including the Current Semester}}$$

CGPA to Percentage Conversion Formula is given below:

$$\text{Percentage (\%)} = CGPA \times 10$$

9.12. Eligibility for the Award of the Degree

A student shall be declared to be eligible for the award of the MCA. Degree provided to the student has

1. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student’s programme within the stipulated time.
2. Successfully passed all the Courses as per curriculum.
3. Successfully completed the Programme requirements, appeared for the End-Semester examinations and passed all the subjects prescribed.
4. The award of Degree must be approved by the Academic Council of SU.

9.13. Declaration of Result: The university shall strive to declare the results of every examination conducted by it within a period of thirty days from the last date of the examination for that particular programme/course and shall in any case declare the results latest within a period of forty-five days from such date

9.14. Convocation: Convocation of the university shall be held every academic year for conferring degrees, diplomas, certificates and shall be conducted as specified in the Act/Statues. The dates for the convocation (normally within six months) shall be notified

well in advance to all the students.

10. PROVISION FOR AUTHORISED BREAK OF STUDY

10.1. Students who apply for Academic Break and the case is recommended by the Deans for justifiable reasons to be recorded, can be granted academic break of one year to the students, if approved by the Vice Chancellor, under the following circumstances:

- a. The student has been continuously ill.
- b. Career advancement
- c. Justified personal reasons.

10.2. The student who is granted academic break shall not be required to pay the academic fee for that year. However, on re-joining, he/she will pay the fee applicable to the batch he/she joins.

11. DISCIPLINE

Every student is required to observe discipline and decorous behaviour both inside and outside the University and not to indulge in any activity which will tend to bring down the prestige of SU. The disciplinary committee of the University enquires into acts of gross indiscipline and notify the University about the disciplinary action taken against the student.

12. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

SU may from time-to-time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations as proposed by the BOS and approved by the Academic Council.

13. EXTRA/ CO-CURRICULAR ACTIVITIES OF THE SCHOOL

The Schools may have the activities like Physical Activities (Sports), Cultural, literature and Media, Social Service Scheme (NSS), Self-Development such as Yoga and Human Values, Nature Club, Yoga, etc. focusing on the holistic development of its students. There are seven committees at the school level.

- Unnat Bharat Abhiyan Cell (UBA)
- Dramatics Club
- Literary Club
- Computer Society of India Club (CSI)
- Sports Club
- Trekking Club
- Culture Club

14. PROGRAMME STRUCTURE OF THE RESPECTIVE PROGRAM

MCA Programme (2 Year) will enable student to learn & develop specific skillsets pertaining to the field of Computer Science Engineering optimizing their ability to do various different jobs. In MCA 1st year will acclimatize the students to the field of engineering and impart **foundation skillset** to students pertaining to the course. The 2nd year develops in the students the **knowledge & operational skillsets** and ensures the imbibing of **core Technical & Managerial skills** which are the pre requisites for a flourishing career in the this field. The Master's degree takes it a notch up to prepare the students for a challenges by honing their **Entrepreneurial and Leadership skills**. This will prepare globally industry ready graduates to execute their skills.

School of Engineering & Technology have imbibed a unique curriculum mapped & in line with the National Education Policy 2020, UGC's Choice Based Credit System (CBCS) and NAAC's recommendations.

The foundation of this curriculum has a major concentration (**60%**) towards the realization of the core subject's learning in the form of **Core Courses (CC)**, the very purpose for which the student seeks admission in the field of Computer Science.

This aspect once having been firmly secured, the prominence of learning and understanding of the allied disciplines would not only directly or indirectly complement the student's knowledge and understanding on the core Computer Science courses but would also widen his/her horizons towards their application in a broader context. For this purpose, the curriculum has **Discipline Specific Elective (DSE)** Courses, which are envisaged to be school-specific courses that contributes in the programme includes courses like Machine Learning, Deep Learning, Data Analytics etc. This will further acculturate in-depth knowledge of the areas of CSE.

In order to re-enforce the element of trans-disciplinarily (the USP of Sushant University), the **Generic Elective-I (GE I)** courses related to social sciences, liberal arts and humanities are proposed to be instilled. In the programme curriculum it is referred to as **Trans Disciplinary Certification Courses (TDCC)** which are open to students of other schools of the university

To give value addition in the program, the programme structure of MCA features 1 course offered only by Harvard Business online School in the form of **Generic Electives II (GE II)** respectively in 3rd semester of the programme.

Dissertation/ projects/ Internships also form an integral part of the program structure and comprise of 14.5% weightage of the total Programme which is in line with the latest guidelines issued by UGC.

Skill Enhancement Courses (SEC) which though may not be integral part of the core discipline, but is instrumental in adding immense value and will help in further broadening the outlook and viewpoint of students. Courses like **Personality development & Communication Skills** subjects are incorporated in this segments.

	Core Courses
	Discipline Specific Electives
	Generic Elective I (GE I)
	Generic Elective II (GE II)
	Dissertation or Internship
	Skill Enhancement Course (SEC)
	Ability Enhancement Course (AEC)
	Service Learning/Community Service Based Course

SEMESTER-I

Course Code	Title	L	T	P	Credits
SE551	Research Methodology	2	0	0	2
CA502	Data Structures	3	0	2	5
CA501	Mathematical Foundation of Computer Science	3	0	0	3
	Department Elective-1	3	0	2	4
CA503	Internet and Web Designing-I	3	0	0	3
Total					17

SEMESTER-II

Course Code	Title	L	T	P	Credits
CA505	Analysis of Design and Algorithms	3	0	2	4
CA504	Digital Design and Computer Architecture	4	0	0	4
CA506	Advanced Java	3	0	2	4
	Department Elective-2	3	0	0	3
CA508	Internet and Web Designing-II	3	0	2	4
Total					19

SEMESTER III

Course Code	Title	L	T	P	Credits
CA603	Department Elective-3	2	0	2	3
CA605	Department Elective-4	2	0	2	3
CA601	Advanced Database Management Systems	3	0	2	4
CA681	Seminar on Summer Training/Internship	0	2	0	2
CA691	Minor Project	0	0	8	4
CA607	Department Elective-5	2	0	2	3
Total					19

SEMESTER IV

Course Code	Title	L	T	P	Credits
	Department Elective-6	3	0	0	3
	Department Elective-7	3	0	0	3
CA682	Study Seminar	0	2	0	2
CA692	Major Project			12	6
	Department Elective-8	2	0	2	3
	Claim credits for Scopus / ABDC / UGC / Patent granted / online course / national level Sport medal / National level championship winner (1st to 3rd) like Hackathon etc				2
Total					19

****Discipline Specific Elective- MCA –CSE**

S_no	Semester	Elective
1	1	Cloud Computing
2	2	Social Media Security
3	3	Cloud Security
4	3	Firewall Management
5	3	Machine Learning-1
6	4	Machine Learning-2
7	4	SQL and Visualization
8	4	Statistics and EDA

**** Subject to change /update**