

## **DEPARTMENT OF COMPUTER APPLICATIONS**

Department of Computer Applications started functioning from 1995 and is offering Masters Degree in Computer Applications.

In the culturally and intellectually rich environment of R.V.R & J.C College of Engineering, the department educates thinkers who do and doers who think broadly and strategically about problem solving methods and process that manipulate and transform information through computers. By providing a rigorous formal education while allowing a maximum intellectual flexibility and diversity, the department equips its students with know - how for technical innovation and vision for leadership.

The Department has modern laboratories to serve the teaching and research needs of the students and faculty of the department. Substantial computing resources that include high end servers with 130 MNC branded systems and all the necessary licensed software, giving students a diversity of experience in Operating Systems are exclusively provided for the department. All systems are fully networked within the department and to the institute's campus using High End CISCO Switches and Fiber Optic Cables. Currently, 45 MBPS leased line Internet connectivity is provided by B.S.N.L. The Department has mail server, which provides mail accounts to all students and staff of the College. Laboratories will upgrade and modernize from time to time. These facilities are maintained by the department's staff of programmers and technicians.

With a right blend of young and experienced staff, the department demonstrates high level of entrepreneurial spirit and a student centered approach. The faculty is dedicated to providing students with a challenging and rewarding course of study in a caring & sharing environment.

The skills associated within teams are learnt and assessed in individual projects. Post graduate research is strongly encouraged through seminars, projects, theses and through the different guest lectures given by the experienced people from industry and academia.

The department encourages and nurtures the innate talents of students through the Computer and Information Science Association (CISA) by organizing several activities like student meets, seminars, guest lectures by the industry and academic experts. CISA organizes a National Level Technical Students Meet CIS'SOIREE every year.

It is planned to submit the program for accreditation in the year 2016-2017.

# ACHARYA NAGARJUNA UNIVERSITY : GUNTUR

## Rules And Regulations Of Semester System In Post-graduate Degree Courses Effective From The Academic Year 2012-2013 Onwards.

### 1. **Admission :**

Candidates shall be admitted into P.G.Degree Courses strictly in accordance with the rank secured at the entrance test, if any, or rank determined on the basis of the marks other criteria determined by the University from time to time, following the rules of reservation of seats for various categories of students.

### 2. **Duration and Course of Study:**

The duration of the P.G.Degree Course is of one/two/three academic years. Each academic year is divided into two semesters. The two semesters in the first academic year are referred to as Semester I and Semester II and the two semesters in the second academic year are referred to as Semester III and Semester IV. For three year course, the third academic year will have semester V and VI. Each semester shall comprise of 16 weeks of instruction.

### 3. **Time For The Completion of The Course :**

The candidates have to complete three years of P.G.Course within 6years from the year of joining the course.

### 4. **Award Of Degree:**

The Post Graduates Degree in the concerned faculty will be conferred on a candidate who has pursued a regular course of study for one /two /three academic years as prescribed in the scheme of instruction and has passed all the examinations as prescribed in the scheme of examination.

### 5. **Attendance:**

- 5.1. Candidates shall put in attendance of not less than 75% in aggregate in the prescribed subjects in each semester including field work , practical, project work, seminars, extension work etc. Condonation of shortage of attendance may be granted by the Principal of the college to the candidate who have put in 60% and above (but less than 75%) attendance of Medical Grounds on production of medical Certificate from a registered Medical Practitioner and also on payment of prescribed condonation fees.

- 5.2. Participants in N.C.C/N.S.S. Special/N.I Camps or Inter-collegiate or Inter-University or Inter-State or National or International Matches or Debates, Youth festivals or Educational tours, if they form part of the curriculum, or such other Inter-University , Inter-College activities as absence . However , the total period of such absence shall not exceed four weeks in a semester.
- 5.3. Candidates who have put in less than 60% of attendance are not eligible for grant of condonation on shortage of attendance and also they are not eligible to appear in the University examination of that semester. Such candidates shall have to repeat the regular course of study of the corresponding semester in subsequent academic year in order to become eligible to appear for the examination . The seats of candidates admitted for repetition of the semester be treated as extra seats over and above the sanctioned strength.
- 5.4. Attendance shall be reckoned from the date of commencement of instruction as per the academic calendar. However , in the case of candidates admitted later (but within the stipulated time) the attendance will be reckoned from the date of admission.
- 5.5. To enable students to know their attendance at the end of each month, the concerned Heads of Departments shall display cumulative attendance for information.

#### **6. Scheme of Instruction and Examination:**

- 6.1. Instruction in various subjects shall be provided by the college as per the Scheme of instructions and syllabi prescribed.
- 6.2. At the end of each semester, University examinations shall be held as prescribed in the scheme of examination.
- 6.3. Each theory paper carries 100 marks of which 70 marks are earmarked for semester-end examination and 30 marks are earmarked for internal assessment to be awarded by the teacher concerned on the basis of two internal tests for 20 marks, 5 marks for class room performance and 5 marks for attendance. Two internal tests are conducted and the performance of the best of two will be taken. However if a student fails to take the tests/ seminar/group discussion, no supplementary internal tests/

seminar/group discussion, will be conducted. No minimum qualifying marks is prescribed in case of internal assessments.

- 6.4. If any student fails to get marks in internal assessments or abstains for the internal assessments test, he/she has to get required marks in the semester -end examination for a pass.
- 6.5. There will be double valuation of theory papers of semester-end examination. In case of difference of above 20% of marks between the two valuations, it will be sent for a third valuation. In such cases the nearest two beneficial to the student will be taken for the purpose of declaring the results. There is no provision for revaluation /personal verification of answer scripts.
- 6.6. Candidates who have put in the necessary attendance in a semester shall be permitted to continue the subsequent semester, irrespective of whether they have appeared or not at the semester-end examination, provided they have registered in all papers for the semester-end examinations. Registration means obtaining a hall ticket for the said examination.
- 6.7. Practical examination in the even numbered semester (II,IV&VI) of Post-graduate courses may be conducted by external examiner appointed by the university from the panel of experts. The practical examinations in the remaining semesters (I,III&V) may be conducted by the internal examiners drawn from the same department/college.
- 6.8. Under semester system there will be no supplementary examinations.

## 7. **PASSING STANDARDS.**

### **M.C.A Course :**

A candidate should secure a minimum of 40% of marks in each semester-end theory paper of university examination/practical ( i.e. 28 marks out of 70 marks) and a minimum of 40% of total marks of each theory paper/ practical (i.e. 40 marks out of 100 marks) and an aggregate of 50% marks of all the subjects in each semester for a pass. Further, a candidate should secure a minimum 50% marks in seminar /project work for a pass.

**8. AWARD OF DIVISION :**

Candidates who have passed all the examinations of the P.G.Degree course shall be awarded classes/ divisions in accordance with the total aggregate marks secured by them in all semester examinations taken together.

1. First Class with distinction - 70% and above.
2. First Class - 60% and above but less than 70%
3. Second Class - 50% and above but less than 60%
4. Third Class - 40% and above but less than 50%

First Class/ Second Class is awarded to a candidate as per the above classification, provided he/she completes the course within the three years from the year of joining the Two Year P.G. course and Four years from date of joining the three year P.G. course.

There is no third class in courses of Master of Laws, Master of Education, Science Faculties and M.C.A.

However, candidates who have passed the examinations in the first attempt along with the batch in which they are admitted will be eligible for the award of First Class with Distinction.

- 8.1. In case of one year P.G. Diploma course First Class/Second Class is awarded to a candidate who completes the course within two years from the year of joining the P.G. Diploma Course.

**9. AWARD OF RANKS :**

Only those candidates who appear and pass the examination in all the papers of each semester at first appearance are eligible for the award of ranks provided they have secured a minimum of Second Class.

**10. Award Of Gold Medals/Prizes :**

Only those candidates who appear and pass the examination in all the papers of each semester at first appearance are eligible for the award of Gold Medals and Prizes. The award of Gold Medals/ Prizes is also subject to the other conditions prescribed for the respective Gold Medals/Prizes.

**11. Betterment Examination :**

The candidates are eligible to improve their aggregate % of marks in each semester separately or in all the semesters put together,

provided they have passed the whole examination but secured less than 60% on the aggregate. Candidates who seek improvement in the aggregate % of marks ( in a semester or in all the semester put together) to 60% and above are eligible to betterment examinations even in individual papers in which they have already secured 60% or above. But, no candidate who has already secured 60% or more marks in the aggregate either in the normal course or through betterment examination shall be eligible to appear for betterment examinations. Regular study candidates can appear for betterment examinations for each semester along with subsequent examinations only after passing in all papers of preceding semester - end examination. They can also appear betterment examinations of any semester after passing the course, subject to other conditions prescribed. However, there is no provision for betterment of marks secured at internal tests.

Three chances are given for betterment examinations. For purpose of classification, only such examination, betterment or otherwise, which is completed within the period of three years from the date of joining Two year P.G. course and Four years from the date of joining Three year P.G. course shall be taken into account. After above prescribed period marks secured at the betterment examination shall not be taken into account for awarding a class. However, these marks will be added for improvement of the percentage of marks of the candidate. The candidates have to pay prescribed betterment fees for every appearance.



## CHOICE BASED CREDIT SYSTEM (CBCS)W.E.F.2013-2014

1. ANU implements the "**Choice Based Credit System (CBCS)**" in all PG Courses offered under the jurisdiction of AcharyaNagarjuna University w.e.f. 2013-2014.
2. To maintain uniform total credits of 50,100,150 and 250 respectively for 1,2,3 and 5 year P.G. Courses for all 2,4,6 and 10 semesters put together(fixing 25 credits per each semester). However there is flexibility in fixing total credits for professional courses.
3. Every paper offered in each of PG Courses may have Lecture (L), Practical (P) and / or Tutorial (T) components associated to it.
4. Generally Lecture component in each of the papers will have 4/5 credits, whilePractical/Tutorial will have 3/2 credits. Depending on the requirements of a particular course, the BOS of the particular course may prescribe project/dissertation is to be decided by them, Subject to a maximum of 10 credits and not violating recommendation No.2 above.
5. Evaluation of each paper will be done to a maximum of 100marks including internal component of 30 marks(20 marks test+5 marks seminar+5 marks attendance) as usual. After evaluation, Assignment of Grade Letter and Grade Point (GP) to every paper is allotted as shown below at the end of each semester.

Sl.No	Range of Marks	Grade Letter	Grade Point
1.	≥ 90 and ≤100	O	10
2.	≥ 80 and ≤ 90	A	9
3.	≥ 70 and ≤ 80	B	8
4.	≥ 60 and ≤ 70	C	7
5.	≥ 50 and ≤ 60	D	6
6.	≥ 40 and ≤ 50	E	5
7.	<40	F	Zero
8.	ABSENT	-	-

6. Only Grades obtained in each paper will be shown in the marks memorandum to be issued to the students in every semester.
7. In each semester, Semester Grade Point Average (SGPA) shall be computed as follows (the following table shows Grades obtained by a student in all 4 semesters).

Paper No.	Credits(CR)	SEM-1	SEM-2	SEM-3	SEM-4
1.	5	A	B	A	B
2.	5	B	C	B	A
3.	5	C	B	A	O
4.	5	D	E	B	A
Practical (Two Practical's put together)	5	E	A	B	C

Computation of SGPA,  $SGPA(SEM-1) = \frac{\sum GP * CR}{\sum CR}$   
 $= (9 \times 5 + 8 \times 5 + 7 \times 5 + 6 \times 5 + 5 \times 5) / 25 = 7$   
 Similarly, SGPA (SEM-2) = 7.4, SGPA (SEM-3) = 8.4, SGPA (SEM-4) = 8.6

8. At the end of the course, Cumulative Grade Point Average(CGPA) shall be calculated as follows:

$$CGPA = \frac{\sum \sum GP * CR}{\sum \sum CR}$$

$$= [(9 \times 5 + 8 \times 5 + 7 \times 5 + 6 \times 5 + 5 \times 5) + (8 \times 5 + 7 \times 5 + 8 \times 5 + 5 \times 5 + 9 \times 5) + (9 \times 5 + 8 \times 5 + 9 \times 5 + 8 \times 5 + 8 \times 5) + (8 \times 5 + 9 \times 5 + 10 \times 5 + 9 \times 5 + 7 \times 5)] / 100 = 7.85$$

### Conversion of CGPA to Percentage:

Aggregate Percentage (AP) = CGPA \* 9.5

For example, If CGPA=7.85, the Aggregate Percentage (AP)=7.85\*9.5=74.58

9. A science student has to secure a minimum of 'E' Grade in each paper and also a minimum SGPA of 6.0 points (D Grade) in any Semester to clear that semester. Suppose any student gets 'E' Grade in two or more papers but fails to get an overall SGPA of 6.0 (D Grade), Then he/she is free to reappear any of the paper(s) in which the student got E Grade of his/her choice in the subsequent examination(s)

**Note: Similar clause is to be defined for (i) Arts and Commerce (ii) Law(iii) M.Ed. and (iv) MCA as per rules and Regulations of semester system in Post Graduate Degree/Diploma courses effective from Academic year 2002-03 onwards.**



Further, the overall result is declared based on the aggregate percentage as per the following criteria:

If AP  $\geq$  70 Distinction;  $\geq$  60 but  $<$  70 First Class;  $\geq$  55 but  $<$  60 High Second Class;  $\geq$  50 but  $<$  55 Second Class **for Science Courses.**

For example, If AP =74.58 then the result is declared as B-Grade

If AP  $\geq$  70 Distinction;  $\geq$  60 but  $<$  70 First Class;  $\geq$  55 but  $<$  60 High Second Class;  $\geq$  50 but  $<$  55 Second Class;  $\geq$  40 but  $<$  50 Third Class **for Arts Courses.**

10. Aggregate Percentage (AP) & Class will be shown in the transcript in addition to the Grade obtained by the student.
11. In order to full fill "Choice Based System" every student shall choose two Non-Core mandatory papers one each in 4th and 5th semesters in addition to the core papers prescribed for the course in which he/she was admitted and these two papers shall be chosen from other disciplines.
12. The grades secured for the Non-Core papers mentioned in (11) above will not be considered in the computation of CGPA, but students should get minimum of 'E' Grade to clear the Non-Core papers and will be vividly displayed in the transcript and this will only indicate his/her exposure to other disciplines, which may have added advantage in placements.
13. Each department shall have to identify two Non-Core papers to be offered to the students of other disciplines.
14. The departments shall have to design the time-table in such a way that core papers to be offered are to be accommodated from Monday to Thursday only; 11.00A.M -1.00 P.M on Friday and Saturday are to be reserved for Non-Core papers in 2nd and 3rd Semesters (4th and 5th semesters in case of MCA).

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