

PROGRAMME PROJECT REPORT (PPR)

PROGRAMME- MASTER OF SCIENCE IN INFORMATION TECHNOLOGY

[M.SC. (IT)]

A) Programme's Mission & Objectives-

Mission-

Dr. C. V. Raman University's Institute of Open & Distance Education focuses on providing quality education through distance learning, matching with the parameter of regular programme and producing capable leaders in the field of information technology, who are prepared with the necessary skills to make high-quality applications and able to work with in multinational IT companies.

- Mission of this programme is to provide an intensive, practically oriented programme.
- Also provide computer education to learners comes from ruler and tribal background through quality education and strengthen the young talent by enhancing their skills to establish themselves in society.
- Also provide an opportunity for graduates of non computing courses to develop key specialist skill for a career in computing.
- This programme is an ideal for complementing your expertise with core computing skills.

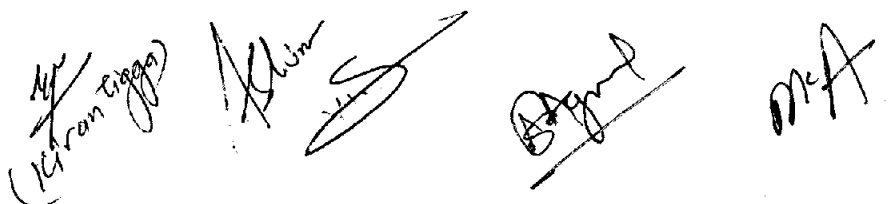
Objectives-

The objectives of programme related to the skill development of learners over the trends of information technology so they can secure their future and cope up with new technology. Following are the key objectives of this programme-

- The objective of this programme is to provide opportunities to learners of ruler and tribal background to establish themselves in competitive environment through their skills in information technology.
- We develop positive attitude to learners and motivate them by exploring new domain of knowledge.
- Also provide an opportunity for graduates of non computing courses to develop key specialist skill for a career in computing.
- The broad objective of the M.Sc.-IT programme is to prepare graduate learner for productive careers in the software industry and academic by providing an outstanding environment for teaching in the core and emerging areas of the discipline.

B) Relevance of the Program with University's Mission and Goals-

Dr. C. V. Raman University aims to provide high standard of liberal education to its students, catering to their intellectual growth, personality development & nurtures them



to be responsible adults committed to high ethical standards through various courses offered from different fields like commerce & management, science, arts, etc in regular mode as well as Open & Distance Learning mode. Relevancy of the programme defined in following points-

- To equip postgraduate learner with an integrated set of skills that will allow them to develop their professional careers in Information Technology.
- To equip learner with the theoretical and practical knowledge that is necessary to enable them to understand the design of complex computer application/science.
- Skills to work with higher end applications in internet technologies; also managerial ability to analyze, design, develop and to maintain software development.
- Due to new innovations and growing demand of computer education our goal is to teach specialized courses to learners to enhance their knowledge in computer application.
- Our aim to provide them practical and working knowledge to prepare them for graduate studies, Govt. jobs as well as self employment, so that they can be ready for economical opportunities.

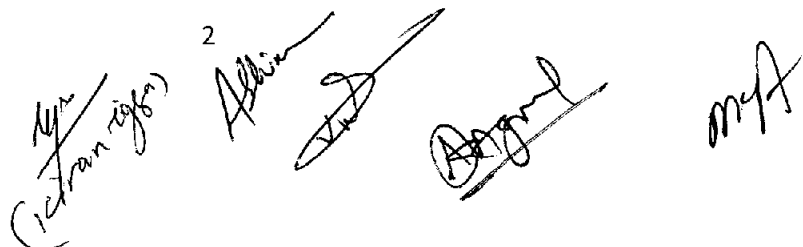
C) Nature of Prospective Target Group of Learners-

This program is specifically designed to cater the need of learner's that is not able to study through regular mode. Working Professional, Housewives, Students from rural area, Students who do not wish to prefer regular courses due to various reasons & Students who cannot afford costly regular courses are target group learners. The targeted learner's group of the program is urban, ruler and tribal area who passed their graduation exam from any stream from recognized university and want to learn about computer technology and its uses in our daily life as well as in the industries. This programme targeted those students who opts information technology degree in higher studies and become software professionals or researchers in private as well as government sector. The programme helps learner to acquire the latest skills and build their future capabilities using world-class technology.

D) Appropriateness of Programme to be conducted in Open and Distance Learning Mode to Acquire Specific Skills and Competence-

The aim of the programme is to provide and spread computer education to the learners of ruler and tribal area so they can enhance their knowledge towards computer education and information technology and their fields. Computer degree programme are always very high in demand as new innovations are take place all the time in the field of IT.

- After completion of programme learner will be able to join other programmes like M.Phil & Ph.D., learners can also apply for Govt. jobs like Assistant Prof., Assistant programmer or programmer.
- Learners also achieve the various jobs in the field of Information Technology sector.
- This programme helps learners to acquire required skills in Information Technology.
- This programme also provides specialization in the field of research area.

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- Learners can also study computer programme via distance education, so they can balance their work and education simultaneously.

E) Instructional Design-

Curriculum Design, Program Structure & Duration of Program-

M.Sc. (I.T.) is two year post graduation programme in Information Technology. The eligibility of course is Bachelor degree in any stream. The minimum duration of this programme is two years (4 semester), although student may complete the programme gradually within a maximum period of 5 years. This programme is for the learner who wants to learn computer languages and want to know about applications of computer system.

Credit Points-

All courses offered by us carry a certain value in terms of credit-points. A credit point is a way of expressing the learning hours required to study a certain unit, in a book or a course. Generally, one credit point is considered equivalent to about 30 learning hours. These learning hours could mean the time you spend in face to face counseling, self study, practical, assignment, project, participating in discussions on the topic, listening to audios, viewing especially prepared videos, etc. That means for 2 credit points student has to undertake 60 hours of learning per subject & for 3 credit points student has to undertake 90 hours of learning. Master of Science (M.Sc.) Information Technology programme has duration of two years and has weightage of 64 credits. Master of Science (M.Sc.) Information Technology programme has duration of two years and has weightage of 64 credits. Following is the program structure of M.Sc. (IT) programme.

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**MASTER OF SCIENCE IN INFORMATION TECHNOLOGY
(MSCIT)**

New Proposed Scheme of Examination

Duration - 24Months		Eligibility - Graduate in any		Subject					
Course Code	Name of the Course	Credit	Total Marks	Theory		Practical /project		Assignments	
				Max	Min	Max	Min	Max	Min
FIRST SEMESTER									
1MSCIT1	Fundamentals of Computers & Information Technology	3	100	70	25	-	-	30	11
1MSCIT2	Windows & MS Office	3	150	70	25	50	18	30	11
1MSCIT3	Programming Methodology & Programming in C	3	150	70	25	50	18	30	11
1MSCIT4	Computer Networks & Internet	3	100	70	25	-	-	30	11
1MSCIT5*	Digital Electronics & Logic Design	3	100	70	25	-	-	30	11
Total aggregate required to pass		15	600	350	140	100	40	150	60
SECOND SEMESTER									
2MSCIT1	Objects Oriented Programming with C++	3	150	70	25	50	18	30	11
2MSCIT2	DBMS & SQL (With MS Access / MS SQL Server)	3	150	70	25	50	18	30	11
2MSCIT3	Computerised Accounting with Tally	3	150	70	25	50	18	30	11
2MSCIT4	Programming with VB.Net	3	150	70	25	50	18	30	11
2MSCIT5*	Data Structure with C++	3	150	70	25	50	18	30	11
2MSCIT6	Minor Project	3	100			70	25	30	11

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Total aggregate required to pass	18	850	420	168	250	100	180	72
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THIRD SEMESTER

3MSCIT1	Operating Systems	3	100	70	25	-	-	30	11
3MSCIT2	Java Programming	3	150	70	25	50	18	30	11
3MSCIT3	Software Engineering	3	100	70	25	-	-	30	11
3MSCIT4	Computer Architecture	3	100	70	25	-	-	30	11
3MSCIT5	Artificial Intelligence And Expert System	3	100	70	25	-	-	30	11
Total aggregate required to pass		15	550/600	350	140	50	20	150	60

FOURTH SEMESTER

4MSCIT1	Computer Graphics	3	100	70	25	-	-	30	11
4MSCIT2	Data warehousing & Mining	3	100	70	25	-	-	30	11
4MSCIT3	Advanced Java Programming	3	150	70	25	50	18	30	11
4MSCIT4	Discrete Mathematics	3	100	70	25	-	-	30	11
4MSCIT5	Major Project	4	200	-	-	140	50	60	22
Total aggregate required to pass		16	650/700	280	112	190/240	76/96	170	68

Evaluation Scheme -

1. 36% in each theory, practical, project, dissertation & internal assessment but the total aggregate for passing is 40%.
2. Total project work carrying 300 (Major Project + Minor Project) marks has to be done under the guidance of a Project supervisor. Learners have to prepare project report under the guidance of project guide allotted by the university. Viva-voce will be conducted in the presence of an external examiner.

Duration -

This programme has duration of two year although student may complete the programme gradually within a maximum period of 5 year.

Medium -

English/Hindi shall be the medium of instruction and the examination may be written in Hindi or English.

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Requirement of Faculty and Support Staff -

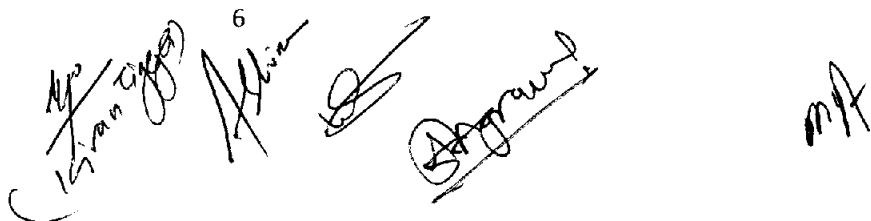
For M.Sc. (IT) programme we have two faculty members (full time-dedicated for ODL courses) has the level of Associate and Assistant Professor. Supporting staffs will be deputed at the learner support centre as per need of the course curriculum.

Instructional Delivery Mechanism & Usage of Media for Distance Learning-

The methodology of instruction in the distance learning mode in the university is different from that of the conventional regular programs. The system adopted for this more learner oriented and the learner is an active participant in the pedagogical process. Most of the instructions are imparted through distance education methodology and face to face mode as per requirement.

The programme delivery methodology used in the distance learning mode follows a multimedia approach for instructions, which comprises-

- **Self Instructional Written Material-** The printed study material (written in self instructional style) for both theory and practical components of the programs is supplied to the learners in batches for every course.
- **Audio-Visual Material Aids-** The learning package contains audio and video CDs which have been produced/adopted by the University for Better Clarification and enhancement for understanding of the course material given to the learners. A video programme is normally of 25-30 minutes duration. The video cassettes are screened at the learner support centre during specific sessions which are duly notified for the benefit of the learners.
- **Counseling Sessions-** Normally counseling sessions are held as per schedule drawn by the IODE DR. C. V. RAMAN UNIVERSITY. These are mostly held outside the regular working hours of the learner support centre.
- **Teleconferences-** Live teleconferencing sessions are conducted via Internet/ satellite through interactive Video Conferencing facility (available at some places) from the University studios, the schedule of which is made available at the learner support centre.
- **Industrial Training/Practical/Project work-** Some programmes have industrial training/practical/ project component also. Practical are held at designated institutions for which schedule is provided by the learner support centre. Attendance at practical is compulsory. For Project Work, comprehensive project guide, in the form of booklet, is provided to the student along with the study material.
- The printed study materials will be dispatched periodically to the enrolled students for each paper of study. These materials will be as guide for the students for effective learning. The assignment for internal assessment shall also be dispatched along with the study material. Online modules are also available for some courses. These are in

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progress and as and when available, these will be available on the website of the students for registered candidates.

- The counseling sessions will be of 30 days duration for a course in a year. The actual schedule and place of contact program shall be announced and communicated to students in – time.

Nature of Contact Classes -

During the contact sessions, the counselors are supposed to guide/discuss with the learner's, based on the course material. The learner's can solve their difficulties by discussing with their colleagues as well as with the counselor during contact sessions. Apart from this contact sessions, learners will have to attend practical as well as various training schedule conducted by the respective learner support centre.

Learner Support Services -

Dr. C. V. Raman University Institute of Open And Distance Education has a fully fledged Learner Support Division (LSD) to provide guidance and help to its students. Necessary information is passed on to the registered student through modern means of communication as SMS, website and e-mail. For the convenience of learner, computer, photocopy machine, internet, WIFI facilities have also been provided. The learner support division has a web centre and SMS No. 56161 where learner can message their problems and seek answer. Bulk SMS are sent to learners regarding their registration detail, dispatch of study, material time table for contact class, submission of examination forms, examination schedule etc. from time to time. Important information and necessary material are also sent through e-mail and through regular post. University's website www.cvru.ac.in also provides information about the various programmes being offered by the institute of open and distance education, the syllabus, assignment, programme guide.

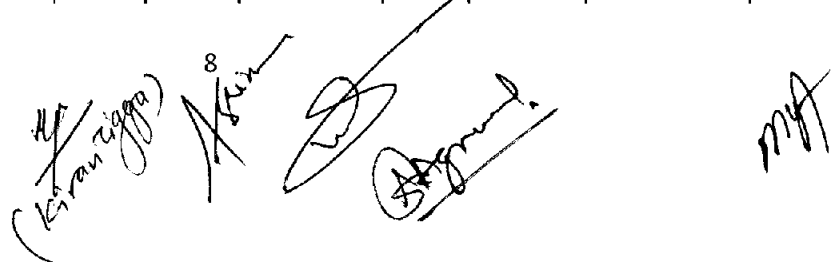
Counseling & Study Structure -

Entire M.Sc. (IT) course has been divided into counseling & study structure in terms of hour. Total study hours required for subject of 2 credits are 60 hours & for subject of 3 credits are 90 hours per semester. Study structure of M.Sc.-IT programme is as below-

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STUDY STRUCTURE

Sl. No.	Course Code	Title of the Course	Credit	Total Hours Of Study	Counseling and Study Structure (hours)				Project
					Face to Face Counseling	Self Study	Practical	Assignments	
First Semester									
1	1MSCIT1	Fundamentals of Computers & Information Technology	3	90	12	51	-	27	-
2	1MSCIT2	Windows & MS Office	3	90	12	33	18	27	-
3	1MSCIT3	Programming Methodology & Programming in C	3	90	12	33	18	27	-
4	1MSCIT4	Computer Networks & Internet	3	90	12	51		27	-
5	1MSCIT5*	Digital Electronics & Logic Design	3	90	12	51		27	-
Second Semester									
6	2MSCIT1	Objects Oriented Programming with C++	3	90	12	33	18	27	-
7	2MSCIT2	DBMS & SQL (With MS Access / MS SQL Server)	3	90	12	33	18	27	-
8	2MSCIT3	A. Computerized	3	90	12	33	18	27	-



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		Accounting with Tally							
9	2MSCIT4	Programming with VB.Net	3	90	12	33	18	27	-
10	2MSCIT5* *	Data Structure with C++	3	90	12	33	18	27	-
11	2MSCIT6	Minor Project	3	90	-	-	-	-	90

Third Semester

12	3MSCIT1	Operating Systems	3	90	12	51		27	-
13	3MSCIT2	Java Programming	3	90	12	33	18	27	-
14	3MSCIT3	Software Engineering	3	90	12	51		27	-
15	3MSCIT4	A. Computer Architecture	3	90	12	51		27	-
16	3MSCIT5	C. Artificial Intelligence And Expert System	3	90	12	51		27	-

Fourth Semester

17	4MSCIT1	Computer Graphics	3	90	12	51		27	-
18	4MSCIT2	Data warehousing & Mining	3	90	12	51		27	-
19	4MSCIT3	Advanced Java Programming	3	90	12	33	18	27	-
20	4MSCIT4	Discrete Mathematics	3	90	12	51		27	-
21	4MSCIT5	Major Project	4	120	-	-	-	-	120

F) Procedure for Admissions, Curriculum Transaction & Evaluation-

Admission Policy for M.Sc. (IT) with minimum eligibility & fee structure-

Admission to M.Sc. (IT) programme shall be through merit and/or, entrance test as per rules of the university. The minimum eligibility for admission into this programme for the candidates is having passed graduation in any stream from any recognized university by state govt. and by Dr. C. V. Raman University. All the procedure of admission for the programme will be done through online mode. Application will be invited by the university with it stipulated time period where students have to apply for the same with all their testimonials and required fees.

Fees Structure-

SI.	Course	Duration	Fee Charged for Complete Programme
1.	M.Sc. (IT)	2 Years	24800

Financial Assistance -

The University also offers e-scholarship to SC/ST students as per norms of the Govt. of Chhattisgarh authorized schemes.

Evaluation System -

The system of evaluation in open and distance learning system has a multi-tier system of evaluation.

1. Self-assessment exercise within each unit of study.
2. Continuous evaluation mainly through assignments which are tutor-marked practical assignments and seminar/workshop/extended.
3. The term-end examinations.
4. Project work.

The evaluation of learners depends upon various instructional activities undertaken by them. A learner has to write assignment responses compulsorily before taking term-end examination from time to time to complete an academic programme. A learner has to submit TMA responses to the learner support centre established by IODE Dr. C. V. Raman University. A learner should keep duplicate copies of assignments responses of TMA that may be required to be produced at Student Evaluation Division on demand. Term-end examination will be conducted at various examination centre approved by institute of open and distance education Dr C V Raman university spread all over the Chhattisgarh.. The weightage for Term End Examination will be 70% and weightage for Internal Assessment will be 30 % for this programme.

(A) Internal Assessment (Continuous Assessment i.e. Home Assignment)- 30% weightage .

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(B) Term End Examination - 70% weightage

Term End Examination	70
Internal Assessment	30
Total Marks	100

The University conducts Term-end Examination in semester system and held in the month of Nov/Dec and May/June every year. Students will be permitted to appear in term-end examination subject to the conditions that-

- 1) Registration for the courses, in which they appeared is valid,
- 2) Minimum Time to pursue these courses is elapsed.
- 3) Submission of required number of assignment in respective courses by the due date.

(C) Project Work -

Project work carrying 300 marks has to be done under the guidance of a Project supervisor. Learners have to prepare project report under the guidance of project guide allotted by the university. Viva-voce will be conducted in the presence of an external examiner.

(G) Requirement of the laboratory support and library resource -

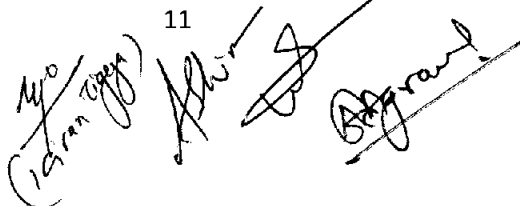
Laboratory is required as a part of this curriculum with well equipped computer systems with high speed of connectivity to provide practical approach to the learner's with the help of new applications and technological trends of IT. Resources in the form of reference books and journal will be made available to the learners in the university central library as well as in departmental reference library, which they can access for gaining knowledge.

H) Cost estimates of the programme and the provision-

This programme was already designed and developed in the year 2009-10. In this process of development considering today's scenario, the current cost estimate which includes developmental cost, delivery cost & maintenance cost for this programme comes to amount of Rs.929200 provision is made of 930000.

I) Quality assurance mechanism and expected programme outcomes

The centre for internal quality assurance and department of information technology of university is accountable for regular monitoring of programme by continuous updating of the curriculum and syllabus. The feedback all stakeholders in term of relevance and appropriateness in catering to the need of society, economy and environment are also considered in these key aspects. According to the feedback provided stakeholders including learners on continuous basis, a

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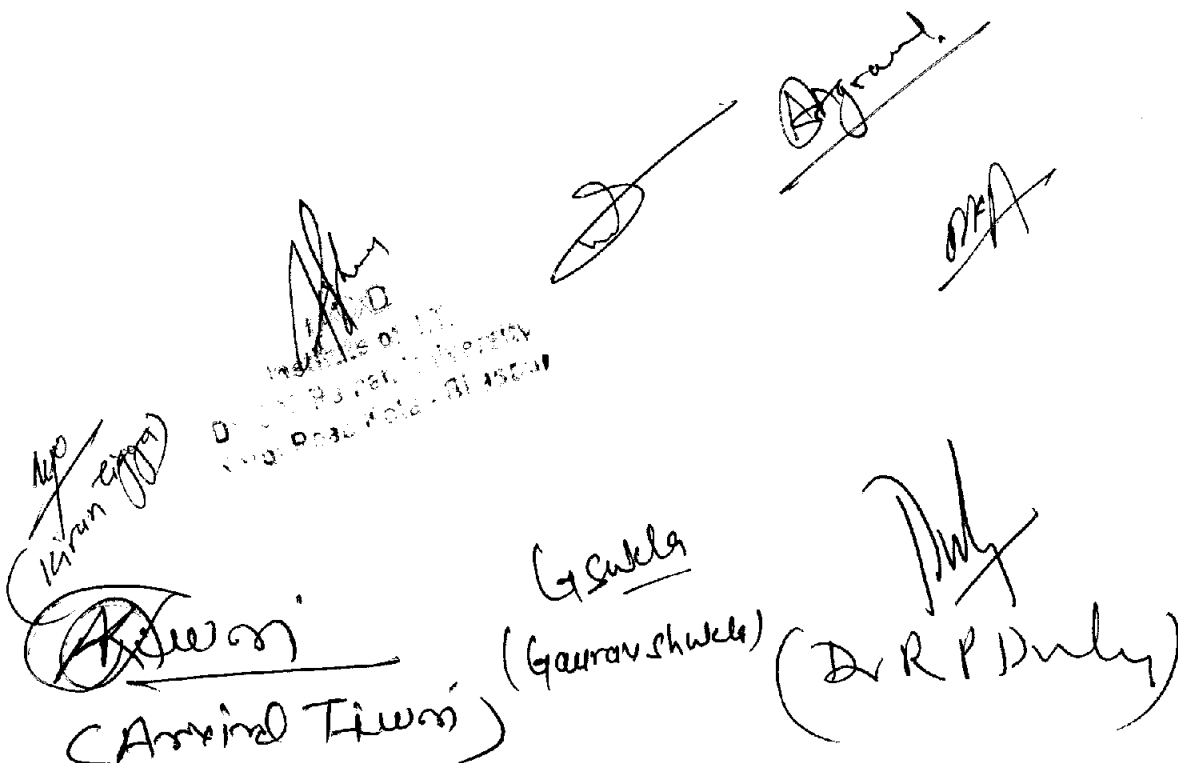


suitable action plan for M.Sc.-IT programme will be developed and duly incorporated into the teaching and delivery system.

Outcomes -

“At the end of the programme expected outcomes”

- To acquired a general knowledge, principles and mechanisms of Computer.
- To prepare the learners for employability.
- To acquired a basic knowledge of Subjects.
- To acquire techniques relevant of subjects taught.
- To provide the practical expose and knowledge acquiring skill.
- To crate and develop the presentation skill in seminar/conference.
- To develop skill to E-library software and internet resources independently.

The image shows several handwritten signatures and a central stamp. The stamp is from the Institute of IT, D. P. S. R. P. University, and is dated 20/09/2019. The signatures are: Kiran (top left), Anand Tiwari (bottom left), G. Sakela (Gaurav Sakela, bottom center), and Dr. R. P. Duly (bottom right). There are also two other signatures at the top right.