

Dr B R AMBEDKAR OPEN UNIVERSITY
Hyderabad, Telangana
Programme Project Report – PPR

Name of the Faculty/Department: SCIENCE – DEPARTMENT OF PHYSICS

Name of the Programme: MASTER OF SCIENCE IN PHYSICS (M.Sc)

S.No.	Parameters	Details
a.	Programmes mission & objectives: <i>(its alignment with industrial/ learner demands)</i>	<p>Mission:</p> <ul style="list-style-type: none"> • To produce quality students ready for teaching and research • To prepare students with good morals, ethical with strong knowledge in the field of Physics and its applications. • To conduct innovative research in the field of physics and disseminate the results at national and international levels • To be actively involved in the community problem solving by utilizing physics in developing science and technology <p>Objectives:</p> <ol style="list-style-type: none"> 1.To deliver quality education in Physics to students through well-designed courses of fundamental topics and of technological importance. 2.To imparting students with comprehensive knowledge and better understanding in theoretical as well as experimental aspects of Physics through core and elective courses for holistic development 3.To inculcate the scientific approach and problem-solving abilities and to equip students with a broader knowledge base. 4.To understand the concepts and significance of the various physical phenomena. 5. To carry out experiments to understand the laws and concepts of Physics and apply the theories and the skills acquired to solve real time problems.

b.	<p>Relevance of program with Dr BRAOU's Mission & Goals:</p>	<p>The programme is relevant to Dr.BRAOU mission and goal i.e. Access to relevant quality education and training programmes for diverse sections of society with a focus on hitherto deprived sections at lower costs by using the modern technologies in teaching-learning processes as well as in administrative and support services.</p>
c.	<p>Nature of prospective target group of learners :</p> <ol style="list-style-type: none"> 1. Specify the target group: 2. Needs of the target group: 	<p>The learners in this mode of education are basically the employees of public/private sectors, over aged learners, housewives and learners who couldn't complete their studies and to enhance their educational qualification. Those living in remote and backward areas.</p> <p>Those who want to upgrade their skills and those who want to go for higher levels in their carrier may also join in this programme.</p>
d.	<p>Appropriateness of program to be conducted in Open & Distance Learning (ODL) mode to acquire specific skills & competencies: Specify the expected learning outcomes in terms of:</p> <ol style="list-style-type: none"> 1. Learning outcomes : 2. Knowledge attainment : 3. Transferable Skills and Competencies: 4. Reflection of academic, professional and occupational standards: 	<p>Offering the programme in ODL mode is highly appropriate because it provides an unique opportunity for pursuing higher education in Physics who are otherwise couldnot pursue their due to various reasons.</p> <p>Learning Outcomes:</p> <ol style="list-style-type: none"> 1. The learners get the ability to use the skills in Physics and its allied areas. 2. Able to identify and apply the principles and concepts they learned in real life challenges. 3. They will be able to face the market competencies <p>Knowledge attainment</p> <ol style="list-style-type: none"> 2.Learner will gain knowledge about Physics from fundamental aspects to higher level of the subject and their applications. 3.Understand the theory and applications of Physics to

		<p>meet the industry needs.</p> <p>4. Gains knowledge about research methodologies, effective communications and skills of problem-solving methods and contributes to the nation building.</p>
<p>e.</p>	<p>Instructional Design :</p> <ol style="list-style-type: none"> 1. Curriculum design (<i>Outcome of Expert Committee meeting; Programme Structure: specify the theory, practical, fieldwork, project, etc components</i>): 2. Total Credit hours (<i>including course wise</i>): 3. Detailed syllabus: 4. Duration of the programme (<i>Minimum & Maximum</i>): 5. Medium of instruction: 6. Type of programme (<i>General/ Professional</i>): 7. Faculty and Support staff: 8. Instructional design & delivery mechanism (<i>Media to be used -print, audio, video, online, computer aided, web based, etc. (course wise)</i>): 9. Student Support Service system (<i>Specify the provisions to be made at HQs, Regional Centres, Learner Support Centres and Web based, etc</i>): 	<p>The University adopts multiple-media approach for imparting instruction to its learners for its various programmes of study since its inception. The curriculum development committee consists of subject experts from different universities, experts from Industries will develop the curriculum and regulations.</p> <p>8-Theory Courses and 8-Practical courses for two years as follows</p> <p>I – Year 4-Theory Courses: 4-Practical Courses</p> <p>II – Year : 4-Theory Courses & 4 practical courses;</p> <p>Minimum -2 years; Maximum – 4 years</p> <p>English</p> <p>General</p> <p>2 faculty at Head quarter with Counsellors at LSC</p> <p>Physics:</p> <p>Prof. G. Pushpa Chakrapani, Professor. Dr. U. Vijaya Ushasri, Assistant Professor. Sri. M. Murali Krishna, Support Staff</p> <p>The self - instructional format is used for developing Self Learning Material (SLM) in print and Online mode. Print is the predominant mode of instruction supplemented with Audio, video, AVPRC website, TSAT, AIR, web radio, DD-Yadagiri and 36 BRAOU – You tube channels.</p> <p>Face to Face counseling sessions; interactive radio counselling (IRC); educational TV Broadcasts and web-based counselling. For practical based courses practical sessions are conducted in face-to-face mode (which is compulsory component)</p> <p>Student support service is providing in the HQs and as well as in LSC centers.</p>

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f.	<p>Procedure for admissions, curriculum transaction and evaluation:</p> <ol style="list-style-type: none"> 1. Define the admission policy (<i>including web based tools to be adopted</i>): 2. Eligibility criteria: 3. Fee structure: 4. Financial assistance to learners (if any): 5. Activity planner of all academic activities of the academic session: 6. Policy for Evaluation of learner progress along with methods and tools: 	<p>Admissions: Admission is mainly done through online mode from the eligible candidates.</p> <p>Curriculum is transacted mainly through printed.</p> <p>Self Learning Materials (SLMs), Face to face counselling sessions (theory/ practical), audio and video programmes, interactive radio counselling (IRC) educational TV broadcasts and web based counselling. For practical based courses practical sessions are conducted in face to face mode (which is compulsory component). Evaluation/Examinations are conducted at LSCs</p> <p>B.Sc. or its equivalent in science/engineering</p> <p>Programme Fee: Rs. 15000=00 for First Year (Tuition Fee + admission fee). Rs. 15000=00 for Second Year (Tuition Fee).</p> <p>Face to face counselling are organized in the LSCs</p> <p>Examinations in the programme will be held twice in a year as Spell-I and Spell-II. The duration for the year-end examinations for theory courses, in each course will be three hours and the maximum marks allotted for each course is 70 marks, of two sections. Section-A comprises short answer questions, which carry for 20 marks, each question carries 5 marks. Section-B consists of Essay type answer questions, and the marks for these questions are 50. Each question carries 10 marks. A student is required to answer Four out of Eight questions given in Section-A, and Five out of Ten questions given in Section-B. To sum-up Section - A carries 20 marks (4x 5=20) and Section - B carries 50 marks (5x10=50) with the duration 3 hours. 30% of marks are allotted to formative assessment (15+15) with subject experts.</p> <p>Online digital evaluation is conducting Formative 30% Summative 70%</p>

g.	<p>Requirement of the laboratory support and library resources:</p> <ol style="list-style-type: none"> 1. Laboratory support to the learners (<i>if any</i>): 2. Provision of Practical book for learners (<i>if any</i>): 3. Provision of Virtual Reality methods for Practicals in case of Online learning (<i>if any</i>): 	<p>Lab support: For practical based courses practical sessions are conducted in face to face mode (which is compulsory component) in laboratories at Learner Support Centres well equipped with such facilities.</p> <p>Library resources: Library facility is available at all Learner Support Centres; Regional Centres and Headquarters of the University.</p> <ol style="list-style-type: none"> 1. Manuals are provided to all the admitted students.
h.	<p>Cost estimate of the program and the provisions:</p> <ol style="list-style-type: none"> 1. Indicate the budgetary requirement for: <ol style="list-style-type: none"> 1. Programme Development 2. Delivery 3. Maintenance 	<p>Programme development is an ongoing process and the programme is already on offer. However, before development of the programme, cost analysis was done at the level of the faculty.</p> <p>The University has dedicated budgetary provisions for programme development at the level of Academic, Material Production and Distribution (there is a dedicated full- fledged Material Production and Distribution Division for material production and distribution) and Electronic Media Production Centre (there is a dedicated full- fledged Electronic Media Production Centre for electronic media production).</p>
i.	<p>Quality assurance mechanism and expected program outcomes*:</p> <ol style="list-style-type: none"> 1. Define the review mechanism of the Programme for enhancing the standards of curriculum, instructional design relevant to professional requirements: 2. Define Programme benchmark statements: 3. Mechanism for monitoring the effectiveness of the programme: <p>*Minimum standards must adhere to UGC (ODL) Regulations, 2017 and directions of the Statutory Bodies of the University</p>	<p>Quality assurance mechanisms</p> <p>Standard norms and procedures for course design and development;</p> <p>Standard norms and procedures for establishment of LSCs,</p> <p>Standard norms for appointment of academic counsellors and evaluators;</p> <p>Involving external experts in maintaining quality of curriculum design and development , including student evaluation;</p> <p>All activities of LSCs and examination centers are monitored by University.</p> <p>Assignments are being monitored by faculty to ensure the quality of continuous evaluation. Standardized its course ware based on the credit system. To further standardize its courses it has developed its own house style. There is a mechanism in place for continuous quality assessment for design, development and delivery of</p>

		<p>its academic programmes. The quality is assured at different phases by statutory bodies of the University namely: Board of Studies and Executive Council. Programme evaluation is the norm before undertaking revision of the programme. The above mechanism has been followed for this programme also.</p>
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Signature of Head of the Department with seal

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Signature of the Director Academic with seal

[Signature]

Director (Academic)
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S.No.	Parameters	Details (Please tick)
	(f) Teacher Growth & Skills	✓
	(g) Multiple learning for active learning	✓
	(h) Helps the learner to engage in Higher - order thinking skills	✓
	(i) Critical reasoning active and complex thinking	✓
	V) SLM is :	
	(a) Structured on LOCF (Learning outcome based curricular framework)	✓
	(b) Interactive has Two way communicative approach and conversational format	✓
	(c) Has experience based activities and assignments	✓
	(d) Has clearly stated learning outcomes or detailed concepts / learning map.	✓
	(e) Encourages learners to apply New knowledge and Skills	✓
	(f) Divided into blocks and units	✓
	(g) Has consistent lay out and format	✓
	(h) Has overview of content unit structure	✓
	(i) Introduction	✓
	(j) Expected learning outcomes	✓
	(k) Summary	✓
	(l) Sections and Subsections for presenting appropriate frequency	✓
	(m) Contains examples for national International case studies	✓
	(n) Explanation of icons, symbols and formula for used content	✓
	(o) Explanation of technical, new, difficult terms, in glossaries/keywords sections	✓
	(p) Inclusion of adequate reading material	✓
	B. Audio-Video Material Audio Visuals Materials of the Course	
	(a) Supplements and complements the Self learning Material	✓
	(b) Adequate consideration given for learners' prior knowledge skills and attitude.	✓

S.No.	Parameters	Details (Please tick)
	(b) Involves all the stakeholders	✓
	(c) Follows the University Grants Commission Model of Curriculum or learning outcomes based Curriculum Framework (LOCF) and incorporates local or regional needs	✓
	(d) Curriculum appropriate to the stage of learning.	✓
	(e) Linkages are given to previous and subsequent stages of learning.	✓
	(f) Provides learning experiences which allow in diversity of methods (like learning from practice, opportunities for distributed and concentrated practice, learning with peers, learning in formal situations inside and outside the department, personal study, specific teacher inputs etc).	✓
	(g) The structure of curriculum are defined.	✓
	(h) Strategy on teaching and learning methods is worked out.	✓
	(i) Instructional methods or pedagogy and the media mix are clearly spelt out.	✓
	(j) The content is reliable and justifies the learning outcome(s).	✓
	(k) Curriculum is relevant to national competency requirement.	✓
	(l) Description of credit value for each module or unit in the course is given.	✓

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S.No.	Parameters	Details (Please tick)
	(c) collaborative learning tasks.	✓
	(d) opportunities for observing others	✓
	(e) self-evaluation.	✓
	IV) Consideration the Learner Profile	✓
	(a) literary level (including level of language proficiency)	✓
	(b) age group	✓
	(c) information communication Technology skills	✓
	(d) aim of study,	✓
	(e) personal background and home situation	✓
	(f) prior knowledge	✓
	(g) prior skills, learning situations etc.,	✓
	V) Background of learner	✓
	(a) It is considered the accessibility of course resources and references at the place of learning.	✓
	(b) Learning objectives and outcomes are considered prior to developing learning materials.	✓
	VI) Group of Learning Material	✓
	(a) SLM Course Materials	✓
	(b) e-books	✓
	(c) practical book	✓
	(d) student's handbook	✓
	(e) question bank,	✓
	(f) assignment book	✓
	(g) Audio Video material	✓
	(h) programme guide,	✓
	(i) project manual	✓

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