

IMPLEMENTATION OF NEP 2020

- 1. Free Entry & Free Exit:** *Free Entry is available through open/Merit order. Exit option is available subject to certain conditions.* The RGUKT programme is a six-year integrated study that begins after the 10th grade and leads to a B.Tech. Degree. The six-year study is divided into two parts: a two-year Pre University Course (equivalent to (AP) Intermediate) and a four-year B.Tech. Program. Currently, pre-university education provides early specialization in subjects such as Mathematics, Physics, Chemistry, and Life Sciences (equivalent to MPC + MBiPC). Bringing students into the University at an earlier stage than the norm is to provide students with a holistic education that also includes humanities, liberal arts and computer literacy. PUC is treated as equivalent to a two-year Intermediate (AP) program provided by the Govt. of Andhra Pradesh.

In addition to providing qualitative plus two education in and of itself, the curriculum also strengthens the groundwork for next technical and professional courses. For the students who are relatively weak, it has a mechanism for remedial instruction built in. Furthermore, there is a foundation course in IT that prepares students to access the Information Technology and Communication tools offered by the RGUKT to the fullest in its innovative teaching and learning paradigm. *If the student decides to pursue a career in other professional programmes, they are permitted to exit after Pre-University program.*

- 2. Integrated Programs:** RGUKT offers a six years integrated programme. The six years programme begins with a two-year Pre-University Course (equivalent to Board of Intermediate Education, AP) and is followed by a four-year B. Tech Program. Students are admitted after class X. B. Tech program is offered in seven engineering branches- Civil Engineering, Chemical Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Mechanical Engineering and Metallurgical & Materials Engineering.
- 3. Dual Degree Programs:** Major degree with choice to do Minors within & across branches
- 4. Introduction of Liberal Arts across programs:** Exclusive departments are created to promote performing arts such as Dance, Music, Mrudangam, Yoga. In order to make students responsible global citizens, focus is on holistic development with a special emphasis on

personality development and instruction in the humanities and social sciences. The curriculum is rigorous and places a strong emphasis on athletic development, teamwork, and soft skills.

5. Credits Transfer:

6. National Academic Depository:

7. Skill Up gradation: RGUKT programme is based on a fresh approach to liberal professional education that develops future leaders with a broad perspective on the world. An organized setting for general education, including fundamental abilities in leadership, teamwork, and communication, is offered. Instead of producing too specialized engineers who only know the theory, it strives to produce students who are competent problem solvers and well-equipped with life skills. As the student makes their way through life, it equips them to handle the rigours of the workplace and society. The importance of learning to learn and learning to live is emphasized. Courses are given on soft skills, Subject skills and Life skills, Microsoft up skilling.

8. Experimental Learning Opportunities: The programme combines individualized mentors and sophisticated tutoring tools to implement the learning-by-doing model of education. To achieve the mastery level as the goal, the programme adjusts self-paced learning with flexible time. Teaching, learning, and research are conducted by highly accomplished teachers. Many of them are from prestigious universities. Long term internship programme of one year at 4th year of Engineering provides ample scope for for 'hands on' learning.

9. Faculty Development: Study Leave for Research is provided to support faculty. Overseas opportunity for higher education is extended up to 5 years with pay. At present, 11 faculty members are on study leave pursuing Ph.D in Engineering in IITs.

10. Research Promotion, Publication Grant, and Grant for patent filing: To stimulate and strengthen the research focus in every faculty, Rs. 30,000 is offered as financial aid for presentations, publications, FDPs, and workshops at national and international levels.

11. Community Engagement of Students & Faculty: Helping Hands, Yogasala, Campus Chronicle, Flora & Fauna, Tekzite, Cygnus, Enthusia, Igniter, SDCAC, CDPC, NSS, NCC, Village Adoption etc., provide students with community engagement experience.

12. Mentorship: Teachers are constantly encouraged to guide the students into a specific academic culture. At the PUC level, the mentoring system has also been customised to take into account the students' entire progression. Each teacher will have 30 students to keep an

eye on their performance and provide counselling support as needed. Mentoring is also provided to students of B.Tech.

- 13. Formative Assessment:** Every theory course in a semester is evaluated for 100 marks, of which the end-of-semester exam is for 60 and the internal assessment, which includes mid-term exams and assessments, is for 40. Each laboratory course in a semester (for both B. Tech and PUC) is evaluated for 100 marks, of which Continuous Evaluation/Tests (Internal) for 40 marks and End semester Examination (External) for 60 marks are administered.
- 14. Access to higher Education:** Education at RGUKT is accessible to weaker sections of remote areas. Competitive and Higher Education cells specially focus on bringing the awareness on Higher Education. These two cells will conduct classes for GRE, GATE, MBA and other competitive examinations providing access to the students to go for Higher Education.
- 15. Equity:** Admission will be given to the students by adding appropriate deprivation score who studied in Government schools. Promoting gender equality, picking up slow learners by offering Remedial Education, and conduct of gap analysis tests, Orientation classes and Bridge Course at the entry level of PUC and Induction programme at Engineering level before the allocation of braches will be instrumental in bringing equity among the students.
- 16. Affordability & Accountability:** Students with Low income background are provided free education, food and accommodation. In fact, weightage is given to deprived rural youth during admission process.
- 17. Student Support & Progression:** Effective student support from entry to exit for a student progressing to Higher education is provided.
- 18. Student Involvement & Leadership:** RGUKT has had a reasonably considered number of students' established chapters which play very vital role in building career development and leadership. Students conduct various co-curricular and curricular activities through these cells with the support of the faculty.
- 19. Recognizing, identifying, and fostering the unique capabilities of each student:** PUC programme at RGUKT is extremely important phase where the students are effectively trained towards different engineering domains. Students will acquire multi-dimensional knowledge in foundational subjects and acquire logical, problem solving and basic communication skills. A mandatory Orientation programme is offered for PUC 1 students to address the learning gaps between the existing learning experiences of the students and expected learning needs in

RGUKT. The main objective of this programme is to prepare the students learning ready in the RGUKT environment. It also provides orientation on digital literacy and various aspects of campus and academic life at RGUKT. A gap analysis test is also conducted every year by the university to identify the deficiencies and initiate corrective action.

20. Teaching and Learning: The teaching-learning process in the University is a hybrid mode involving learning-by-doing and conventional teaching. Video lectures from the best of faculty of the country are arranged in class rooms complimented with the interactions and live lecturing done by the competent faculty of RGUKT, who were recruited mainly from the premier institutions of the country. The education system at RGUKT is ICT based and perhaps it is the first University in the country to adopt ICT for educating rural students and to pass several batches of students successfully through the system. It is the first University to adopt the much praised and prestigious NPTEL content apart from using video lectures produced by RGUKT on its own.

21. Multidisciplinary Approach: It is achieved through curriculum integration and the introduction of minor degrees. Apart from Majors in engineering disciplines, there is scope for doing a Minor in other branches of engineering or Science or Management or Humanities and Social Sciences including classical performing arts streams. Flexibility built in the curriculum is along the lines of best of the world universities and is mainly to provide wider choices to students in programmes, paving way for their varied career paths. In consonance with the philosophy of the University and National Education Policy 2020, RGUKT has introduced for the past several years, multidisciplinary courses in all the engineering programs.

22. Creativity & Critical Thinking: Learners absorb a great deal of information through experiential learning. Creativity is promoted among the students by encouraging them to participate in various technical and other fests and also through Hackthon Project.

23. Ethics & human and values: The main objective of RGUKT is to impart to each learner extensive skills of learning to learn, Learning to think, Learning to live and to strength core values of integrity, respect for all, and care for environment. The University has been celebrating all important National and international Days to promote the sense of ethics and values.

24. Extensive use of Technology: RGUKT is a technological university. Education and the intensive use of Information Technology go hand-in-hand at RGUKT. Technology learning process is extremely done through the smart devices. Each student is provided with a laptop. Student – teacher communication is done through email/Whats App, Online Notice Board and other virtual and intranet platforms. In the domain of administration, file management is done through e-filing, meetings are held online and the entire correspondence is done through mails only. The Government of AP considers Education as a public service and merit good.

25. Teachers and faculty as the heart of the learning process: Transparent and Nationwide recruitment is done. Every opportunity is provided for their professional development. Suitable working environment is ensured. All the statutory welfare measures are in place.

26. Education is a public service: RGUKT is a standing example for this. A student can walk barefoot into the campus. University provides uniforms, sportswear, shoes, mattresses, blankets, cot and laptop. The institution is fully residential. The government of AP extends complete financial support towards boarding, lodging and maintenance.

27. Quality Research & Functioning for Innovative Research Proposals: As a part of Research Development, faculty has distinguished themselves by publishing in the internationally acclaimed journals such as IEEE, Elsevier, Springer, Routledge, Blackwell and Taylor and Francis. In order to boost up research in the University and to motivate the faculty to initiate research work, the University has decided to provide seed grant to faculty, after evaluating their research proposals. This grant could cover the basic requirements of the research project envisaged and should pave way for a major grant from a funding agency. The faculty is expected to submit a proposal and make a presentation to a specially set up committee for approval. Efforts are also being made to generate research funding from the Alumni of the University, Philanthropists and Industry. It is proposed to earmark a sensible amount in the budget of the University for the year 2022-23, towards this end

28. Effective Governance and Leadership: Ensured as an inbuilt mechanism through the RGUKT Act 2008 which was approved by the legislature of AP. The statutory Bodies listed by the Act are as follows.

- i. Governing Council
- ii. Academic Council
- iii. Finance Committee

All these bodies are manned with eminent experts drawn from premier institutions like IITs, NITs, central universities and other institutions of National Importance.