The Central Government in consultation with the Planning Commission had sanctioned a scheme of establishment of Regional Engineering Colleges under the Third Five Year Plan in order to expand the facilities for technical education in the country during the plan period. The Regional Engineering College, Kurukshetra was one of the seventeen colleges in the country. Vide letter No. 16-4/60-T.5, dated the 26th February, 1962 from the Secretary to the Government of India, Ministry of Scientific Research and Cultural Affairs, New Delhi, it was established in the year 1963 as a joint and cooperative enterprise of Govt. of India and the State Government of Haryana to serve the State of Haryana and the rest of the country for imparting technical training to youth and for fostering national integration. Its objective was to provide instructions and research facilities in various disciplines of engineering and technology and the advancement of learning and dissemination of knowledge in each such discipline.

The first admission to five year B.Sc. (Engg.) degree course was made by the Institute in July, 1963 at Punjab Engineering College, Chandigarh and Thapar Institute of Engineering & Technology, Patiala, with an intake of 60 students at each place. This was repeated in July, 1964 also. The Institute started functioning on its present campus at Kurukshetra from the year 1965-66. The students were admitted to the first year of the five year integrated B.Sc.(Engg.) degree courses in Civil, Electrical and Mechanical Engineering. In 1967-68, M.Sc. (Engg.) degree courses in Civil, Electrical and Mechanical Engineering were introduced. In 1971-72, a degree course in Electronics & Communication Engineering and a Post-graduate Diploma Course in Scientific Instrumentation were started. In 1976-77, part time M.Sc. (Engg.) degree courses in Electronics & Communication Engineering and Instrumentation Engineering were started. The first registration for the degree of Doctor of Philosophy in the Faculty of Engineering and Technology was done in July, 1967.

The Institute switched over to the four year B.Tech. Degree course with effect from 1985-86. The Course has since been designated as Bachelor of Technology (B.Tech.). The M. Sc.(Engg.) degree in various disciplines has since been renamed as M.Tech. degree with effect from the session 1983-84. In 1987-88, B.Tech. degree course in Computer Engineering and M.Tech. degree Course in Electronics Engineering were started. In 1989-90, M.Tech. degree course in Water Resources Engineering was started in the Department of Civil Engineering. A special two semesters M.Tech. degree course in Instrumentation for candidates holding P.G. Diploma in Scientific Instrumentation has been introduced from January, 1988.