PREFACE

Curriculum document is a comprehensive plan of any educational programme. It is also one of the means for bringing about qualitative improvement in any programme. Under the Chairmanship of Financial Commissioner and Principal Secretary of Technical Education, Government of Haryana, a one day workshop was organized at National Institute of Technical Teachers' Training and Research (NITTTR formerly TTTI), Chandigarh on 21st January, 2003 in which the senior officers from Directorate of Technical Education/Board of Technical Education Haryana, Principals and Head of Departments from polytechnics of Haryana and faculty from NITTTR, Chandigarh participated and deliberated upon various issues, for bringing about qualitative improvement in the technician education system in the state of Haryana. One of the out-standing and unanimous decision of the above workshop was to review the curricula of all the diploma programmes being offered in the State of Haryana especially with a view to include appropriate levels of courses in applied sciences, mathematics, computers, engineering sciences and courses relevant to the present day environment of changing technologies.

As a follow-up of the above workshop, this Institute took-up the revision of all the curricula of various diploma programmes in Haryana and it was decided that to begin with, this institute would work-out the course structure and detailed contents for the first year of various diploma programmes to enable Haryana polytechnics to implement these from the current session 2003 – 2004 in order to cope up with the technological developments taking place in the industry/field organizations.

A series of workshops were held at NITTTR, Chandigarh in the months of May-June 2003 and 1st year curriculum of various diploma programmes was handed over to the Haryana Directorate for its implementation from July 2003. This was followed by another series of workshops for revision of 2nd year and 3rd year curricula of all these courses.

Another workshop was conducted in the month of April, 2004 to include the subject of chemistry in both the semesters of first year. The whole study scheme was re-revised and adjusted in the subjects and order was also done. Consequently a fresh revised document for first year was prepared and sent to the Directorate of Technical Education, Haryana as per their requirement.

The document is based on the feed back from industry/field organizations for wage and self-employment opportunities for the diploma holders in **Computer Engineering** in large, medium and small scale industries. While suggesting employment opportunities for the diploma holders, the three sectors i.e. primary, secondary and tertiary sectors were kept in mind.

To improve upon overall development and efficiency of the students, the contents of various subjects communication skills, present quality standards, work culture etc. have been improved upon to suit present and future requirements by enriching the curriculum by adding practical English communication, report presentation, computer applications in business, e-commerce, e-business, case studies and student centered activities etc.

The document contains the study and evaluation scheme and detailed contents for all the three years to enable the Haryana Polytechnics to implement the revised curriculum from the following year itself.

While working out the detailed contents and study and evaluation scheme, the following important elements have been kept in mind:

i)   Major employment opportunities of the diploma holders

ii)   Competency profile of the diploma holders with a view to meet the changing needs of technological developments and requirements of the employment.

iii)   Vertical and horizontal mobility of the students for their professional growth

iv)   A rational approach for all the curricula of diploma programmes in engineering and technology in the state of Haryana

The document is an outcome of the feedback received by this institute from the experts during the workshop who represented industry, institutes of higher education, research and development organizations, polytechnic faculty and NITTTR faculty.

The revised curriculum aims at developing desired professional, managerial and communication skills as per the requirement of the world of work. We hope that this revision will prove useful in turning out more competent diploma holders in **Computer Engineering**. The success of this curriculum depends upon its effective implementation and it is expected that the managers of polytechnic system including subject teachers will make efforts to create better facilities, develop linkages with the world of work and foster conducive environment as per recommendations made in the curriculum document.

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