

## PREFACE

The wave of liberalization and globalization has created an environment for free flow of information and technology through fast and efficient means the world over. This has led to shrinking of world, bringing people from different cultures and environment together, giving rise to a global village. A shift has been taking place in India from closed economy to knowledge based and open economy. In order to cope-up with the challenges of handling new technologies, materials and methods, we have to develop human resources having appropriate knowledge, professional skills and attitude. Technical education system is one of the significant components for human resource development. Polytechnics play an important role in meeting the requirements of trained technical manpower for industries and field organizations. The initiatives being taken by the State Board of Technical Education, Haryana to revise the curriculum of existing diploma programmes as per the needs of the industry are laudable.

In order to meet the requirements of future technical manpower, constant efforts have to be made to identify new employment opportunities, carry out activity analysis and design need based curricula of diploma programmes. This curriculum document has been designed by identifying job potential and competency profile of diploma holders leading to identification of curriculum areas for the course.

It is needless to emphasize that the real success of the diploma programme depends upon its effective implementation. This will require harnessing and effective utilization of resources. In addition to acquisition of appropriate physical resources, the availability of competent and qualified faculty is essential.

It is time for the managers of technical education system to reorganize the system to accept the challenges of both quantitative and qualitative expansion of technical education. The creation of EDUSAT facilities in the country must be exploited to its fullest extent to reap the benefits of interactive electronic media for teaching-learning process.

It is hoped that polytechnics will carry out job market research on a continuous basis to identify the new skill requirements and develop innovative methods of course offering and thereby infuse dynamism in the system.

**Director**  
National Institute of  
Technical Teachers' Training and Research  
Chandigarh

## ACKNOWLEDGEMENTS

We gratefully acknowledge the assistance and guidance received from the following persons:

- i) Financial Commissioner and Principal Secretary, Technical Education, Govt. of Haryana for initiating this project on designing of curriculum.
- ii) Director, Technical Education and Secretary, State Board of Technical Education , Haryana for taking keen interest and support in the design of this curriculum.
- iii) Additional Director and Joint Secretary, Haryana State Board of Technical Education for their untiring assistance and support in execution of this project.
- iv) Director, National Institute of Technical Teachers' Training and Research, Chandigarh for his guidance and academic freedom provided to Curriculum Development Centre.
- v) Professor and Head, Curriculum Development Centre, NITTTR, Chandigarh for his sustained guidance and support in the design of this curriculum.
- vi) All the participants from industry/field organizations, polytechnics and other technical institutions for their professional inputs in curriculum design workshops.
- vii) Shri Yogendra Kaushal, PA, Curriculum Development Centre, NITTTR, Chandigarh for word processing of this document
- viii) Shri Mohan Lal, Office Assistant and Ms. Beena of Curriculum Development Centre, NITTTR, Chandigarh for their support and secretarial assistance in the conduct of review workshops at Chandigarh.

**Coordinator**