

Yashoda Shikshan Prasark Mandal

Yashoda Technical Campus, Satara

An Autonomous Institute



Quality Assurance Manual



Sr.No.	Description	Page No.
1	Clause 1: Scope.....	5
	1.1 General.....	5
	1.2 Scope of Certification.....	5
	1.3 Distribution List.....	5
2	Clause 2: Normative References.....	7
3	Clause 3: Terms & Definitions.....	7
4	Clause 4: Context of the Organization.....	8
	4.1 Understanding the Organization and its Context.....	8
	4.2 Understanding Needs and Expectations of Interested Parties.....	10
	4.3 Determining the Scope of the Quality Management System.....	11
	4.4 Quality Management System and its Processes.....	11
5	Clause 5: Leadership.....	18
	5. 1 Leadership and Commitment.....	18
	5. 1.1 General.....	18
	5. 1.2 Student Focus.....	19
	5.2 Policy.....	19
	5. 2.1 Establishing the Quality Policy.....	19
	5. 2.2 Communicating the Quality Policy.....	19
	5. 3 Organizational Roles, Responsibilities and Authorities.....	19
	5. 3.1 Organization Chart.....	20
6	Clause 6: Planning.....	25
	6.1 Actions to Address Risks and Opportunities.....	25
	6.2 Quality Objectives and Planning to Achieve Them.....	26
	6.3 Quality Objectives.....	26
	6.4 Planning Changes.....	26
7	Clause 7: Support.....	27
	7.1 Resources.....	27
	7.1.1 General.....	27
	7.1.2 People.....	27
	7.1.3 Infrastructure.....	28
	7.1.4 Environment for the Operation of Processes.....	28

7.1.5 Monitoring and Measurement Resources.....	28
7.1.6 Organizational Knowledge.....	29
7.2 Competence.....	29
7.3 Awareness.....	30
7.4 Communication.....	30
7.5 Documented Information.....	31
7.5.1 General.....	31
7.5.2 Creating and Updating.....	31
7.5.3 Control of Documented Information.....	32
8 Clause 8: Operation.....	33
8.1 Operational Planning and Control.....	33
8.2 Determination of Requirements for Products and Services.....	34
8.2.1 Student Communication.....	35
8.2.2 Determination of requirements related services.....	35
8.2.3 Review of Requirements Related to Services.....	36
8.2.4 Changes to Requirements for Products and Services.....	36
8.3 Design and Development of Products and Services.....	36
8.3.1 General.....	36
8.3.2 Design and Development Planning.....	37
8.3.3 Design and Development Inputs.....	37
8.3.4 Design and Development Controls.....	38
8.3.5 Design and Development Outputs.....	39
8.3.6 Design and Development Changes.....	39
8.4 Control of Externally provided products and services.....	39
8.4.1 General.....	39
8.4.2 Type and Extent of Control of External Provision.....	41
8.4.3 Information for External Providers.....	42
8.5 Product and Service Provision.....	42
8.5.1 Control of Production and Service Provision.....	42
8.5.2 Identification and Traceability.....	43
8.5.3 Property belonging to Student or external providers.....	44
8. 5.4 Preservation.....	45
8.5.5 Post Delivery activities.....	45

	8.5.6 Control of changes.....	45
	8.6 Release of products and services.....	45
	8.7 Control of non-conforming processes outputs, products and services.....	46
9	Clause 9: Performance Evaluation.....	48
	9.1 Monitoring, Measurement, Analysis and Evaluation.....	48
	9.1.1 General.....	48
	9.1.2 Student Satisfaction.....	48
	9.1.3 Analysis and Evaluation.....	48
	9.2 Internal Audit.....	51
	9.3 Management Review.....	51
	9.3.1 General.....	51
	9.3.2 Management Review Inputs.....	52
	9.3.3 Management Review Outputs.....	52
10	Clause 10 Improvement.....	52
	10.1 General.....	53
	10.2 Nonconformity and Corrective Action.....	54
	10.3 Continual Improvement.....	55

Clause 1: Scope

1.1 General

The scope and intent of the YTC QMS to define and communicate its commitment to Impart Technical Education Skills for Undergraduate & Post Graduate Programs of Engineering, Pharmacy, Computer Applications & Management approved by AICTE & PCI, recognized by DTE Maharashtra and Affiliated to DBATU University, Lonere & Shivaji University Kolhapur through its vision and Mission as:

Institute Vision:

YTC, Satara looks forward to become a globally renowned institute of centre of excellence in technology and management education for rural community for technical and professional knowledge.

Institute Mission:

- M1. To achieve the quality and an academic excellence in the frontier engineering areas and management relevant primarily to the nation
- M2. To train and produce the highly skilled and globally competent professionals through quality technical education and to prepare them with industry ready engineers for immediate employment and entrepreneurship.
- M3. To inculcate and develop the research culture can be attributed to quality outputs in terms of research practices and products.
- M4. To develop the professionals having high values of ethics, lifelong learning, teamwork, leadership and social responsibility
- M5. To enhance and empower the rural community by improving the productivity of the agricultural sector

1.2 Scope of Certification

Scope of Certification of Quality Management System covers all the academic departments of the YTC and support branches namely Examination, Research & Consultancy, Innovation & Incubation, Administrative, Planning, Library, Training & placement, co-curricular & extra-curricular activities of students, Stores & purchase, Security, Hostel and Health, Central workshop, sports.



1.3 Distribution List

Sr. No.	Copy Holder/ department
1.	Director
2.	Registrar
3.	Associate Director- Pharmacy
4.	Associate Director- Management
5.	Associate Director- Computer Application
6.	Dean IQAC
7.	Dean Academics
8.	Controller of Examinations
9.	Training and Placement Officer
10.	Research & Development Coordinator
11.	Head of the Department- Artificial Intelligence and Data Science
12.	Head of the Department- Civil Engineering
13.	Head of the Department- Computer Science & Engineering
14.	Head of the Department- Computer Science & Engineering (Cyber Security)
15.	Head of the Department- Electrical Engineering
16.	Head of the Department- Mechanical Engineering
17.	Head of the Department- Mechatronics Engineering
18.	Head of the Department- Electronics and Telecommunication Engineering
19.	Head of the Department- Robotics & AI
20.	Head of the Department- Basic Science & Humanities
21.	Head of the Department- B. Pharm
22.	Head of the Department- M. Pharm
23.	Head of the Department- Pharm D.
24.	Head of the Department- Management
25.	Head of the Department- Computer Application
26.	In-charge Central workshop
27.	In-charge Alumni cell
28.	In-charge Entrepreneurship and incubation cell
29.	In-charge Institute Innovation Council
30.	Office Superintendent



31.	Sports In-charge
32.	In-charge Internal Committee
33.	In-charge Anti-ragging cell
34.	In-charge Student Council
35.	In-charge Student Grievances Cell
36.	Head-Central Computer Center



Clause 2: Normative References

The documented information of the YTC Quality Management System, in part or in whole, are normatively referenced to the Quality Management Systems Requirements, Quality Management Fundamentals and Vocabulary.



Clause 3: Terms and Definitions

The terms and definitions used in this Quality Manual are

Abbreviation used	Meaning
YTC	Yashoda Technical Campus
QMS	Quality Management System
DTE	Director of Technical Education
AICTE	All India Council for Technical Education
PCI	Pharmacy Council of India
UGC	University Grant Commission
NBA	National Board of Accreditation
NAAC	National Assessment and Accreditation Council
B.Tech.	Bachelor of Technology
M.Tech.	Master of Technology
B.Pharm	Bachelor of Pharmacy
M.Pharm	Master of Pharmacy
Pham. D.	Doctor of Pharmacy
BBA	Bachelor of Business Administration
MBA	Master of Business Administration
BCA	Bachelor of Computer Application
MCA	Master of Computer Application
UG	Undergraduate
PG	Postgraduate
IQAC	Internal Quality Assurance Cell
MR	Management Review
PO	Program Outcome
PSO	Program Specific Outcome
PEO	Program Educational Objectives
CO	Course Outcomes
HOD	Head of the Department
CA	Continuous Assessment
ISE	In Semester Evaluation
ESE	End Semester Examination



MSE	Mid Semester Examination
OBE	Outcome Based Education



Clause 4: Context of the Organization

4.1 Understanding the Organization and its Context

4.1.1 Profile of YTC

Established in 2009 under the aegis of **Yashoda Shikshan Prasarak Mandal, Yashoda Technical Campus, Satara**, was founded by the visionary **Hon. Prof. Dashrath Sagare**. The institute offers 15 undergraduate (UG) and 6 postgraduate (PG) programmes and is recognised as one of the prominent technical institutions in the region. It is affiliated with Dr. Babasaheb Ambedkar Technological University, Lonere, and Shivaji University, Kolhapur, and is approved by the Directorate of Technical Education (DTE), Government of Maharashtra, the All India Council for Technical Education (AICTE), and the Pharmacy Council of India (PCI), New Delhi, wherever applicable.

4.1.2 Academic Units of YTC

The academic units of the YTC organizes and conducts 15 undergraduate and 06 postgraduate programs in relevant engineering, Pharmacy, Management and Computer Application disciplines.

As of date, the academic units of the YTC are:

1. Faculty of Engineering
2. Faculty of Pharmacy
3. Faculty of Management
4. Faculty of Computer Application

In addition to these departments YTC also has centers such as,

1. Central Library
2. Central Computer Centre
3. Innovation and Incubation Cell
4. Training & Placement Cell
5. Intellectual Property Rights Cell
6. Central Workshop
7. Hostel and health
8. Sport Complex/Gym



4.1.3 Academic Programs

YTC is an Institute and is affiliated to DBATU, Lonere & Shivaji University, and Kolhapur and as of date offers the following academic programmes.

A. B.Tech Programs

1. Artificial Intelligence and Data Science
2. Civil Engineering
3. Computer Science & Engineering
4. Computer Science & Engineering (Cyber Security)
5. Cloud Computing
6. Civil and Environmental Engineering
7. Electrical Engineering
8. Mechanical Engineering
9. Mechatronics Engineering
10. Electronics and Telecommunication Engineering
11. Robotics & AI

B. M.Tech Programs

1. Mechanical Engineering
2. Computer Science & Engineering
3. Electrical Vehicle Technology

C. Pharmacy Programs

1. B. Pharm
2. M. Pharm
3. Pharm D.

D. Management Programs

1. BBA
2. MBA

E. Computer Application Programs

1. BCA
2. MCA

4.1.4 Medium of Instruction

The medium of instruction at University is English and Indian Language.



4.2 Understanding the Needs and Expectations of Interested Parties

YTC is committed to continually monitor, review and analyze information and relevant Requirements of the interested parties to assure that requirements are effectively managed in the QMS.

Interested Parties:

1. DTE, Government of Maharashtra
2. University Grants Commission [UGC]
3. All India Council of Technical Education [AICTE]
4. Pharmacy Council of India
5. Ministry of Human Resource Development [MHRD], Govt. of India
6. Dr. Babasaheb Ambedkar Technological University, Lonere [DBATU]
7. Shivaji University, Kolhapur [SUK]
8. National Board of Accreditation [NBA]
9. National Assessment and Accreditation Council [NAAC]
10. Governing Council of YTC
11. Students of YTC
12. Industry
13. Parents
14. Employers
15. Faculties
16. Alumni
17. Non-Teaching Staff
18. Suppliers
19. Service Providers

The YTC has determined external and internal issues that are relevant to its purpose and its strategic direction and those that affect its ability to achieve the intended results of its QMS. In like manner, YTC monitors and reviews these external and internal issues.

Internal Issues:

1. Student Feedback on Teaching-Learning
2. Student Feedback on Facilities
3. Student and Faculty Feedback on curriculum
4. Course Exit Survey Rubric
5. Lab Exit Survey Rubric



6. Lab work assessment rubric

7. Program exit survey

External Issues:

1. Parent Feedback

2. Employers Feedback

3. Alumni Feedback

4. Employer, Alumni and Parent Feedback on curriculum

5. Rubrics Filed by External oral examiners

6. Industrial Visit/In plant Training evaluation rubric

4.3 Determining the Scope of the Quality Management System

Based on the external and internal issues, requirements of relevant interested parties and the nature of products and services offered and produced, YTC has determined the boundaries and applicability of its QMS that covers core areas of **Academics, Administration, Student and Faculty welfare, Research and Development, Students Training and Placement** etc.

4.4 Quality Management System and its Processes

The QMS is maintained and continually improved through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive action and management review. These systems and the relevant processes are as follows:

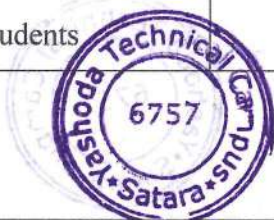
Sr. No.	QMS	Process	Issue No.	Responsibility
4.4.1	Administration [YTC-QMS-ADMIN]	4.4.1.1 Process of Budget Allotment and Utilization	YTC-QMS-ADMIN-01	Registrar
		4.4.1.2 Employee Recruitment	YTC-QMS-ADMIN-02	
		4.4.1.3 Student Admission	YTC-QMS-ADMIN-03	
		4.4.1.4 Purchase	YTC-QMS-ADMIN-04	
		4.4.1.5 Student Scholarship	YTC-QMS-ADMIN-05	



		4.4.1.6 Feedback of Stakeholders on the Facilities Provided by Institute	YTC-QMS-ADMIN-06	
		4.4.1.7 Central Library	YTC-QMS-ADMIN-07	
		4.4.1.8 Up-gradation of Institute Website	YTC-QMS-ADMIN-08	
		4.4.1.9 Faculty Performance Appraisal	YTC-QMS-ADMIN-09	
4.4.2	Academics [YTC-QMS-ACAD]	4.4.2.1 Process of defining the Vision, Mission of Institute /Department, PO's, PSO's	YTC-QMS-ACAD-01	Dean Academics
		4.4.2.2 Process for designing/revising the program curriculum	YTC-QMS-ACAD-02	
		4.4.2.3 Process used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes	YTC-QMS-ACAD-03	
		4.4.2.4 Processes followed to improve quality of Teaching & Learning Academic Calendar	YTC-QMS-ACAD-04	



	4.4.2.5 Load Distribution and time Table	YTC-QMS-ACAD-05	
	4.4.2.6 Processes for student feedback its evaluation and action taken	YTC-QMS-ACAD-06	
	4.4.2.7 Internal Examination	YTC-QMS-ACAD-07	
	4.4.2.8 End Semester Examination	YTC-QMS-ACAD-08	
	4.4.2.9 Process for Implementing student Projects/mini-projects	YTC-QMS-ACAD-09	
	4.4.2.10 Process for Partial Delivery of Courses from Industry Experts, Guest Lecture, Industrial Visits, Value added/add on courses and its relevance to PO's and PSO's	YTC-QMS-ACAD-10	
	4.4.2.11 Academic Audit	YTC-QMS-ACAD-11	
	4.4.2.12 Processes used for assessment of CO's and Attainment of PO's	YTC-QMS-ACAD-12	
	4.4.2.13 Procedure for Maintenance and Up-gradation of Laboratory Documents	YTC-QMS-ACAD-13	
	4.4.2.14 Weak and Bright Students	YTC-QMS-ACAD-14	



		4.4.2.15 Program Specific Student Chapter Activities	YTC-QMS-ACAD-15	
		4.4.2.16 Student Mentoring	YTC-QMS-ACAD-16	
4.4.3	Faculty and Student Welfare [YTC-QMS-FSA]	4.4.3.1 Grievance Redressal mechanism	YTC-QMS-FSA-01	Respective Cell Coordinators
		4.4.3.2 Alumni Interaction Cell	YTC-QMS-FSA-02	
		4.4.3.3 Parent Interaction Cell	YTC-QMS-FSA-03	
		4.4.3.4 Ant ragging and Sexual Harassment Cell	YTC-QMS-FSA-04	
		4.4.3.5 Annual Gathering Sneha	YTC-QMS-FSA-05	
		4.4.3.6 Sports	YTC-QMS-FSA-06	
		4.4.3.7 Student Co-Curricular and Extra-curricular Activities	YTC-QMS-FSA-07	
		4.4.3.8 Hostel and Health	YTC-QMS-FSA-08	
		4.4.3.9 Institute Student Chapter Activities	YTC-QMS-FSA-9	
		4.4.3.10 Student Council	YTC-QMS-FSA-10	
		4.4.3.11 Technical competitions	YTC-QMS-FSA-11	
4.4.4	Research and Development [YTC-QMS-R&D]	4.4.4.1 Process for deputing faculties for training /FDP/STTP	YTC-QMS-R&D-01	Research and development Coordinator



		4.4.4.2 Process for conducting training/FDP/STTP for faculties	YTC-QMS-R&D-2	
		4.4.4.3 Process for Carrying out consultancy	YTC-QMS-R&D-3	
		4.4.4.4 News Letter	YTC-QMS-R&D-4	
		4.4.4.5 Student Publication	YTC-QMS-R&D-5	
		4.4.4.6 Faculty Publication	YTC-QMS-R&D-6	
		4.4.4.7 Mechanism for Detecting Plagiarism	YTC-QMS-R&D-7	
		4.4.4.8 Process For Implementation of Funded Projects	YTC-QMS-R&D-8	
		4.4.4.9 Entrepreneurship and Incubation Cell	YTC-QMS-R&D-9	
4.4.5	Training and Placement [YTC-QMS-TP]	4.4.5.1 Student Training/Internship	YTC-QMS-TP-01	Training Placement Officer
		4.4.5.2 Student Placement	YTC-QMS-TP-02	
		4.4.5.3 Employer Feedback	YTC-QMS-TP-03	



Clause 5 Leadership

5.1 Leadership and Commitment

5.1.1 General

The core committee members of the YTC, HOD's, Coordinators and Principal are actively involved in the implementation of the YTC's Quality Management System (QMS) and are accountable for its overall effectiveness. Top Management initiates and fully supports the vision and strategic direction for the continuous sustainability and enhancement of the QMS. It is fully committed to support the Quality Policy and Quality Objectives. It also provides direction to the integration of the QMS requirements into each process of the organization and is committed to promote the use of the Process Approach and Risk-Based Thinking, as well as the engagement and motivation of the employees.

5.1.2 Focus

YTC ensures the requirements of the stakeholders and expectations are clearly defined, understood, achieved at all levels of the organization.

This commitment is outlined through the following means:

1. Setting of Institute and Department objectives to continually improve processes at all level.
2. Examination Result analysis is done to identify the risk and opportunities.
3. Imparting the value-added courses, aptitude training to meet the requirements of student placements

Related Documents:

Institute, department objectives	Result Analysis and action taken
Record of value-added course, aptitude training, bridge courses and their relevance to PO's	Record of in-plant training, industrial visits, guest lecture, workshops etc. and their relevance to PO's

5.2 Policy

5.2.1 Establishing the quality policy

Top management of YTC Intend to continually enhance performance of our institute through:

- Functioning in structured, organized and coordinated manner.



- Trying to be conscious about our responsibilities and authorities at formal and informal levels.
- Taking every possible initiative in the role assigned.

5.2.2 Communicating the Quality Policy

The Quality Policy is disseminated among the stakeholders using

- Website

5.3 Organizational roles, responsibility, and authorities

Top management has assigned responsibilities and authorities for all relevant functions and QSP's of the YTC. These are communicated through organizational structure and charts; the issuance of administrative communications from the Executive Director such as appointments, special orders etc. Functional roles of employees relevant to a QSP's are described as,

Role	Responsibilities
Management	• Mobilize internal and external resources to strengthen the institute • Plan and provide infrastructure facilities • Provision of human resource • Strategic plan for institutional development • Periodic monitoring and evaluation of various processes • Purchases
Director & Associate Directors	• Arrange periodic meeting of various bodies and committees • Effective implementation of OBE • Academic planning and monitoring • Examinations • Academic development • Student training and placement
Registrar	• Office administration • Employee recruitment • Budget and Finance • Purchase and Accounts • Annual magazine • Compliance with AICTE, DTE & University • Transport • Infrastructure and Maintenance • Amenities • Faculty grievance • Signing of MoUs with Institutions of National and International Importance
Dean Academics	• Design and Development of Instructional Process • Framing and revising rules and regulations pertaining to academics through Academic Council • Preparation & distribution of academic Calendar and central time table • Registration of students at the beginning of each semester



Role	Responsibilities
	• Decisions regarding offering of backlog courses • Approval of examiners for various examinations at undergraduate and post-graduate levels • Granting semester leave on genuine grounds to the students as per University rules and regulations • Granting extensions etc. in the time period for submission of Seminar, and/or Thesis of Master of Engineering as per University rules and regulations. • Result analysis and remedial measures • Academic audit • Internal and external examinations • Student discipline • Student Feedback on Teaching-learning and action thereof
Dean IQAC	• Preparation and control of quality system documents • Organizing training in quality system, ensuring that the employees understand the quality policy, objectives and working of the installed quality system. • Planning and implementation of internal quality audits. • Maintaining the quality system & reporting on its functioning; implementation of all corrective and preventive actions • Maintenance of Records of the operative Quality System and its constituent documents. • Coordination Quality initiatives such as NAAC, NBA, NIRF • Periodic submission of SAR, Compliance reports to NBA, New Delhi • Preparation and Execution of process for PO and PSO attainment • Need assessment and execution of faculty awareness training for NBA and OBE
Research and Development Coordinator	• Up-scaling and enhancing the research activities within the institute • Awareness of funding opportunities to support faculty research and externally funded sponsored/consultancy projects • Initiating, submission and follow-up of project proposals to sponsoring agencies and timely completion of the sponsored projects. • Motivate faculty to write projects • Promotion of consultancy work in the institution. • Maintain and update record of research publications.
Training and Placement Officer	• Organizing Campus placement drives for students • Arranging Student training • Assisting the departments in the placement of students in public/private sector undertaking for project semester and summer term training, if required • Collecting feed-back from Industry about performance of students employed and transmitting the same appropriately for reactive corrections



Role	Responsibilities
	• Promoting Industry institute interaction • Collecting information regarding offering of various continuing education programmes, sponsored/ in-house short-term courses, winter/ summer schools, workshops etc. and transmitting the same to industries/ institutions/ users through brochures. • Identify and provide for training needs of students • Proposing annual T & P budget • Facilitate career guidance to students • Maintaining of record of student opting for Higher studies • Encourage industry institute linkages and collaborative research • Industrial visits of academic departments • Maintaining documentary evidences required for NBA, NAAC
Faculty and Student Welfare	• Welfare of students in the Institute, their conduct, discipline, seriousness to studies, health, scholarships, fee concessions etc • NSS programmes and financial support to NSS activities. • Elections for the posts of YTC Student Association • Formation of and financial assistance to Cultural, Technical and Sports councils • Financial assistance to students for travel grant for presenting research paper/ poster in National/ International Conference • Financial assistance to students for participation in sports, literary, technical and cultural activities • Faculty development • Student admissions • Co-curricular and Extra-curricular activities • Student council • Student welfare • Student counselling • Student grievance • Publicity • Publication of technical magazine and news letters • Student transport facility
Administrative Officer	• College roster • Service books • Faculty personal files • Recruitment process • Maintain minutes of meeting • Coordinate day to day activities of office • Purchase process • Annual college budget • FRA • Coordinate the college bus service
Heads of Department	• Preparation of teaching load (Assigning courses to various faculty members and laboratory instructional work to technical staff) • Initiating the instructional design, development/modification process through Board of Studies (BOS) as and when the need



Role	Responsibilities
	• Collecting feedback from students and industry to serve as input for instructional design, development and modification • Purchase of machinery, equipment, software & instructional material as required • Plan and execute academic activities of the department • Maintaining records like-Documents related to NBA, NAAC • Students" complaints and their Redressal • Ongoing research projects and consultancy work in the department • Monitoring & evaluation of students for Project/Semester work • Planning and execution of strategy for placement of the students • Upkeep and maintenance of machinery and equipment in Department • Ensuring continuous up-gradation of machinery, equipment, facilities, instructional aids etc. in the department • Organization of continuing education programs, sponsored/in-house short-term courses, workshops, seminars, conferences, symposia, winter/summer schools • Interaction with the students, providing them the required guidance & counselling • Monitoring and functioning of technical societies in the department • Annual physical verification of assets and recommendations for write off • Conduct the meetings of the following committees regularly ➤ Departmental Advisory committee ➤ Faculty meetings ➤ Departmental Purchase Committee • Ensure timely utilization of various grants • Maintain discipline and culture in the department • Pick and promote strengths of students / faculty / staff • Monitor academic activities of the department • Propose department budget • Adhere to QMS procedures • Maintain records of departmental activities and achievements
Controller of Exams	• Preparation of schedule/date-sheet of Examinations for Mid Semester, End Semester, and Supplementary Examination • Appointment of Examiners, Jr and Sr. Supervisors and support staff • Carry out the work of assessment of answer books from the internal and external examiners • Receive the Practical/Project examinations mark sheet from the concerned department • Feed the awards/grades into the Results Processing System • Declare the results of various examinations and uploading on Institute Website • Preserve the record of examination • Deal with the cases of Unfair means, lapses on the part of the students



Role	Responsibilities
	• Generate and print mark sheets of declared results and handover to the respective sections • Process bill related to examination activities • Provide data related to Examinations requested by various stakeholders
Librarian	• Acquisition, stocking and display of books, journals, back volumes, national/international standards, CD-ROM, databases, audio and video cassettes, search packages etc. • Cataloguing the acquired library material • Ensuring smooth access, issue and return of library material as per documented procedures • Providing reprographic facility for reference material • Maintenance of library equipment and material • Annual physical stock verification of library material • Inter library networking for library and information services to users • Maintaining records related to NBA, NAAC, NIRF • Plan and propose expansion / development • Maintain library discipline and culture • Prepare annual budget for library
Alumni In-charge	• Ensure alumni registration • Prepare alumni news letter • Arrange "Alumni" meet
Workshop In-charge	• Imparting basic technical knowledge and developing requisite skills in various manufacturing processes e.g. carpentry, electroplating, forging, machining, metal casting, sheet metal work, tin smithy and welding etc. • Providing on-the-job training covering practical, managerial and commercial aspects of manufacturing to the students • Assisting and guiding in the manufacture of experimental rigs and set-ups for UG, PG students and faculty-research scholars • Modernization and up gradation of infrastructural facilities • Conducting special training programmes for in-service technical personnel • Preparing Material Requirement • Maintenance of generator facility
Counseling Cell In-charge	• Facilitate career guidance to students • Assist students suffering from psychological disorders • Arrange for professional counselors • Maintain record of counselling activities • Student academic counselling
Director, Physical Education	• Ensure smooth conduct of sports • Ensure proper use of gym • Purchasing of sports equipment • Encourage students to participate in Zonal tournaments



Role	Responsibilities
	• Creation and upkeep of sports facilities
Entrepreneurship Development and Incubation Cell	• Promote start-ups by creating incubation infrastructure, friendly policy for start-up funding, use of start-up products in govt. sector, start-up spaces and marketing support programs for start-up • Promoting the changes to current curricula with the aim of developing entrepreneurship in students • Conduct entrepreneurship boot camps to encourage students participate in entrepreneurial activities • Offer start-up founders the option to participate in placement in the year after graduation to increase risk-taking ability • Develop a mentorship body to provide support to entrepreneurs; partner with ecosystem players as possible • Create entrepreneurship clubs amongst the student community • Arranging workshops/trainings for Entrepreneurship and Incubation • Monitoring the Entrepreneurship and Incubation activities • Maintaining the documentary record of cell
Head-Central Compute Center	• Ensuring the availability of computing facilities as and when required by the users • Continuous modernization and up-gradation of the facilities • Ensuring the physical infrastructure to be in good working condition/order through preventive and corrective maintenance • Repair and maintenance of computers and related equipment in Institute laboratories • Extending services for purchase and installation of Computer related instruments/equipment, software's by Departments • Organizing training programmes on design, use, fabrication and maintenance of computer related instruments/ equipment • Offering consultancy and services to outside organizations • Ensuring internet and e-mail service to users of YTC • Ensuring proper working of YTC Website • Liasoning with different units for their Software need • Build understanding with IT companies for the benefit of students and faculty of YTC • To maintain a good level of infrastructure for students, faculty and research scholars • To coordinate with internet service providers for the delivery of best internet and other services
Hostel Warden	• Maintaining the discipline in the hostel • Monitoring the facilities provided in the hostel • Arranging meetings of hostel committee • Doing food quality checks in hostels on regular intervals • Maintenance of facilities in the hostel • Arranging procurement of facilities need for hostel • Providing preliminary medical services to the student community and if need be to refer them to the specialists



Role	Responsibilities
	• Arranging and participating in special health drives for prevention/eradication of various cases.
NPTEL Coordinator	• Carrying out the activities under NPTEL local chapter • Creating awareness about the ongoing courses • Facilitating the enrollment of students and faculties for NPTEL courses • Monitoring the progress of NPTEL courses • Record keeping of registration, course completion, certificates etc.



Clause 6: Planning

6.1 Actions to Address Risks and Opportunities

YTC considers risks and opportunities when taking actions of its Quality Management System. Risks and opportunities are identified as part of the understanding of the internal and external issues that are of concern to YTC and its interested parties (clause 4.1 and 4.2) throughout and at all other activities of the Quality Management System. Risks and opportunities are managed in accordance to the YTC Risk Management Procedure and is documented through the use of Risk action plan. These documents define how risks are managed in order to minimize their likelihood and impact.

6.2 Quality Objectives and Planning to Achieve Them

Quality Objectives are established at relevant functions, levels and processes of YTC. The crafted quality objectives meet the required characteristics of the standard, to be:

- a. consistent with the Quality Policy;
- b. measurable and monitored;
- c. in consonance with applicable requirements;
- d. communicated;
- e. updated as appropriate;
- f. relevant to conformity of products, services and enhance Student satisfaction

6.3 Quality Objectives

Quality objectives are defined for YTC's QMS and processes.

1. Objectives of Institute
2. Objectives of Top Management
3. Objectives of Registrar
4. Objectives of Dean Academics
5. Objectives of Faculty and Students Welfare cell
6. Objectives of IQAC Coordinator
7. Objectives of Research and Development Coordinator
8. Objectives of Training and Placement Coordinator
9. Objectives of faculty



6.4 Planning Changes

When changes to the QMS are deemed necessary, YTC ensures that these comply with the requirements and shall consider:

- a. the purpose of the changes and their potential consequences;
- b. the integrity of QMS;
- c. the availability of resources;
- d. the allocation or reallocation of responsibilities and authorities.

When YTC determines the need for changes to its QMS or its specific processes, these changes are planned, implemented and then verified for effectiveness. As necessary, documents are changed in accordance with the mandatory procedure on Documented Information.

Related Documents:

Institute, department and objectives of all process owner



Clause 7: Support

7.1 Resources

7.1.1 General

YTC is committed to provide adequate resources required for the establishment, implementation, maintenance and continual improvement of the QMS. As an internal mechanism for sustenance, assurance and enhancement of the quality culture of education, YTC has established the Internal Quality Assurance Cell (IQAC) for maintaining the momentum of quality consciousness. The IQAC, in coordination with other departments and administration of the YTC, helps in planning, management review, human resource development, infrastructure development, financial resources etc. for each programme, depending upon the number of registered students and the detailed curriculum, the requirements of human and physical resources. The Principal/Director and the concerned heads are responsible for provision of needed resources to ensure smooth functioning of each programme. Resources needed for internal quality audits are also ensured by the Principal/Director as per need projected by IQAC.

YTC commits resources to include: organizational knowledge for instructional delivery, competent employees, infrastructure, environment for the operation of processes and finances.

The process for determining and communicating resource requirements includes:

- a. Management review meeting inputs and outputs;
- b. Capabilities and constraints on existing internal and external resources;
- c. Requirements and expectations provided by the external providers.

7.1.2 People

YTC ensures that it provides sufficient human resources necessary to consistently meet Student, applicable statutory and regulatory requirements for the effective operation of the QMS as well as its identified processes.

YTC employs faculty, non-teaching staff and administrative personnel who are competent on the basis of appropriate education, training, skills and experience as per AICTE's rules and regulation contributory to the attainment quality instruction and efficient and effective support services.

YTC also undertakes faculty and staff development program to enhance necessary competencies and evaluate its effectiveness. Faculty and staff development programs include



support for personnel continuing professional development, mentoring and coaching. Records of education, training, skills and experience are maintained and updated from time to time by various departments in the YTC.

Related Documents:

Faculty List with Details	Staff List with Details
Record of development program organized for faculty and staff	Record of development program attended by faculty and staff

7.1.3 Infrastructure

YTC determines, provides and maintains the necessary and functional infrastructure that contribute in the attainment of its Vision and Mission. The infrastructure provided by YTC includes:

7.1.3.1 Academic and admin Buildings, classrooms, gymnasium, conference rooms, social hall, libraries, science and research laboratories, stockrooms, computer laboratories, offices, workrooms, hostels, health center, training centers, food centers, indoor and outdoor facilities, motor pool area, experimental test sites, central store, workshops shops, storage areas etc.

7.1.3.2 Equipment, hardware and software for libraries, research, laboratories and vital relevant offices of the YTC.

7.1.3.3 Support services such as information and communication system and transportation (Internet Connections, Vehicles).

Related Documents:

List of class room, labs with Details	Details of Project laboratory
Details of infrastructure	Record of equipment/software etc. in laboratory
Safety measures in labs	

7.1.4 Environment for the Operation of Processes

YTC determines, provides and maintains necessary environment for the operation of processes to achieve products and service. The necessary environment includes classrooms and offices conducive to learning and working. s, and respective head of departments are responsible for managing and maintaining the necessary physical, psychological, and environmental factors to achieve the quality objectives.



7.1.5 Monitoring and Measurement Resources

YTC determines and provides the resources needed for monitoring or measuring to verify conformity of products and services being offered by the YTC. The tools use includes instruments, testing and monitoring software, monitoring systems. Moreover, records of calibration/ maintenance are retained as documented information to serve as evidences of fitness for purpose. YTC also takes appropriate action to replace or repair the resources so that measuring equipment remain fit and work as desired. Measuring equipment is used as per standard procedures to safeguard it from damage, adjustments and deterioration.

Related Documents:

Calibration records of equipment	Maintenance record [Preventive and Breakdown]
Record of consumable purchase and usage	

7.1.6 Organizational Knowledge

YTC considers the specific knowledge necessary for the operation of its processes and to achieve conformity of products and services. YTC has adopted a documented information procedure for effective planning, operation and control of various QMS processes e.g. maintenance, retention and disposition of knowledge.

The operationalized perspective of organizational knowledge of YTC are borne from internal and external sources,: Internal sources include administrative and management of learning records, student records, lessons learned from successes and failures in instruction (result analysis), students feedback for courses, intellectual property, knowledge gained from experience, while; External sources may encompass as standards as indicated in any information gathered from any interested parties in the form of feedback such as employers, parents, alumni among others. This knowledge is maintained and made available to the extent necessary.

Related Documents:

Result analysis and action taken	Student academic records
Record of needs and expectations of interested parties	Record of student project/seminar/laboratory/continuous evaluation/Internal test/Assignment/Weak Bright Test Record etc.



7.2 Competence

YTC determines the extent of competence necessary for its people to ensure effectiveness of the QMS. To guarantee the competence of the employees YTC employs faculty and administrative personnel who are competent on the basis of their appropriate education qualifications, training, skills and experience as per AICTE's rules and regulations contributory to the attainment of quality instruction and for the efficient and effective support services of YTC. The record of all such recruitment is maintained as evidence. The performance of the employees is assessed regularly and documented information of evaluation is maintained. Whenever applicable, YTC undertakes faculty and staff development programs in order to enhance necessary competencies and evaluate its effectiveness. Faculty and staff development programs include domain specific short term training programs for continuing professional development, mentoring, trainings, etc.

Related Documents:

Record of Faculty Performance Appraisal System	Record of development program [workshop, STTP, Training, Conference etc.] organized for faculty and staff
Record of development program [workshop, STTP, Training, Conference etc.] attended by faculty and staff	

7.3 Awareness

YTC ensures that the persons performing the work are aware of the quality policy, relevant quality objectives, their contribution to the QMS effectiveness, including improved performance to include the implications of non-compliance to the QMS requirements. In so doing, YTC conducts awareness training, workshop sessions, consultation meeting and follow up activities on the QMS in all levels of the YTC as described in the scope statement of the YTC QMS.

Related Documents:

Record of training program of Faculty and staff for awareness of QMS/NBA/NAAC etc



7.4 Communication

YTC top management determines the internal and external communications relevant to the QMS, including the subject of the communication, when communication occurs, participant and ways of effective communication. The documented information of communication includes stakeholders Feedback & Satisfaction Rating, Management Review Agenda (Inputs and Outputs). Other uncontrolled communication modalities include emails, administrative communication systems (Internal and External) through the use of , request letters, , newsletters and bulletins, special orders, notices, circulars, official website, and social media platforms, banners, stamps and tags.

Related Documents:

Record of tools for dissemination of QMS, Vision, Mission, PEO's etc.

7.5 Documented Information

7.5.1 General

YTC maintains a documented QMS as a means to ensure that products and services conform to specified requirements. YTC QMS documentation includes both documents and records. YTC use the term “documented information” to describe the collectively the terms “document” and “record” and undergo different controls as required by the standard. The Documented information described in this section includes both the hard and electronic copies of manuals, forms and records.

YTC's QMS is described in three levels of documented information, as:

Level I: Quality Manual provides the scope of the QMS and the applicable clauses contained and supported by the QMS.

Level II: Quality System Procedures (QSP) provides detailed requirements for each of the processes with the intent to specify who does what, when, where, how the process or action/task is performed, and what documentation is used to verify that all required quality related activities had been executed as required.

Level III: Quality System Forms (QSF) provides objective evidence that the required product or service quality and Student requirements are achieved and that the YTC QMS has been Implemented as stated e.g. tags, labels, stickers, preprinted sheets, stamps, and other means to identify the status of materials, products, equipment, gauges, and devices used in by YTC to achieve the specified requirements.



7.5.2 Creating and Updating

When creating and updating documented information YTC ensures the following guidelines are in place, as:

- a. Identification and description (e.g. title, date, author, reference no, revision date, approval etc.);
- b. Format and media utilization (electronic, paper hard copy, language, graphics and media, software version);
- c. Review and approval for suitability and adequacy

The approval of documents is required prior to use. The responsibility to control various documents has been assigned as under:

- All documents are approved with information to the MR with an aim to maintain uniformity in the whole organization.
- Quality Policy and Quality manual are reviewed by MR and approved by the Executive Director.
- Documents pertaining to a specific area are controlled by the functional head of that area.
- Registrar controls documents of External origin.

7.5.3 Control of Documented Information

YTC has adopted a documented procedure for the control of documented information. A documented procedure for control of documents has been established by each department/branch/ center to ensure that records are maintained and are accessible, whenever required for effective operation of quality management system. All quality records are maintained by respective functional Heads as defined in laid down procedures and the same are to be controlled, updated and made available by them. Documented information is required to support the effectiveness of the YTC's QMS and is controlled to ensure that:

- a. It is available and suitable for use, where and when it is needed;
- b. It is adequately protected from loss of confidentiality, improper use, or loss of integrity;
- c. Distribution, access, retrieval and use;
- d. Storage and preservation, including preservation of legibility;
- e. Control of changes;
- f. Retention and disposition.

The guideline defines the controls to ensure that all personnel have access to the latest approved information and to restrict the use of obsolete information. Moreover, documented information



of external origin determined to be necessary for the planning and implementation of the QMS is also identified as appropriate and controlled in accordance with Quality System Procedures and Forms.



Clause 8: Operation

8.1 Operational Planning and Control

YTC has planned and developed the processes needed for transformation of entering students to engineers, managers, entrepreneurs, and professionals. Deans, and respective head of departments are responsible for the implementation and continuation of quality planning as per standards for product realization established by the YTC. YTC has adopted quality planning mechanisms to meet the requirements of the standards and outcomes of its QMS using program educational objectives (PEO) and Risk Management as Framework.

PEO is a measurement-based strategic management tool that provides method of aligning institutional activities for strategizing and monitoring performance of strategic goals overtime. The YTC composes different programs with unique program outcomes and objectives with relevant metrics that show the final perspective of the YTC's Strategic-Plan. The plan re-states the YTC's Vision and Mission that guides the general direction of the entire YTC in attaining its vision and set the tenor of its actions.

Inputs to the attainment of objectives include SWOT analysis and cascading points of the YTC's Vision and Mission.

Moreover, Risk Management framework as a quality control measure, helps YTC in managing its risks effectively at all levels, functions and processes of the YTC within the specific contexts of the organization. By procedure, all documented information derived from risk management process is adequately reported and is used as basis for strategic decision making and accountability at all relevant organizational levels contributing to the realization of the vision, mission, targets and objectives of the YTC and is consistent with the stakeholders and legal requirements. YTC's quality planning considers the information related to the context of the University, current resources and capabilities, product and service requirements and acceptance criteria, as well as, the need to outsourced processes.

Quality planning includes determining the quality objectives and requirements of the clients which includes the following:

1. Defining, monitoring, and updating of quality objectives and requirements of product or service for meeting these objectives
2. Identifying, utilizing and documenting the innovative instructional pedagogies in teaching-learning with corresponding evaluation and management system;
3. Articulation of course instructional material design and development with stakeholder's requirements and other relevant interested parties;



4. Aligning subject matter expertise and skills of faculty with quality instructional equipment and facilities in laboratories in achieving the instructional designed course outcomes by means of instructional designs and research and extension outputs;
5. Designing rubrics to control the instructional process for the assessment and evaluation of students at various stages; and
6. Standardizing the performance criteria and verification of the same for the successful completion of the QMS instruction and support process towards the awarding of B.Tech. and M.Tech. Degrees.

Related Documents:

Department SWOT Analysis	Attainment of PEO's
Innovative Instructional Practices	Course File-Theory, Lab
Load Distribution	Laboratory Manuals
Rubrics	Handbook of YTC's Rules and Regulations
Planning of guest lectures, industrial visits, expert lectures with respect to mapping of PO's and PSO's	Quality Objectives

8.2 Determination of Requirements for Products and Services

YTC ensures that the requirements for the offering of curricular programs are defined including any applicable statutory and regulatory requirements and those considered necessary by the YTC. The scope includes pre-enrolment activities, enrolment processes, management of learning aspects, including periodic assessment and evaluation of YTC students by means of the retention and re-directing procedures up to the conferment of degrees.

Related Documents:

Curriculum Design Process and Curriculum	Record of Internal and External communication of course contents in curriculum design
Assessment of CO's	Students choices for Elective Courses

8.2.1 Student Communication

YTC provides mechanisms to ensure effective communication with the stakeholders and other relevant interested parties. These mechanisms include among others, information brochure, website, telephone and email facilities, bulletin boards, posters, social media, conduct of



meetings, and distribution of notifications and other pertinent documents. The communication documentation with the stakeholders and other relevant interested parties include:

- Provision of information related to the delivery of instruction;
- Handling of inquiries pertaining to curricular offerings and course requirements;
- Obtaining stakeholder's feedback including complaints;
- The progress/performance including any disciplinary action or attendance shortage is communicated to the parents/guardians of the students
- Display of defaulter list to students
- Meeting of defaulter students with Department Academic Committee
- Placement cell record

Related Documents:

Handbook of curriculum	Minutes of meetings
Stakeholders Feedback	Institute brochure
Admission records	MOUs with industries and institutes
Internal Exam Records	Student Seminar, mini-project, project record

8.2.2 Determination of requirements related to products and services

The Student in this case is student, employing industry, and the society. The curriculum and the delivery processes are designed and transacted in such a way that the requirements of the employing industry are fulfilled. For this, the information is collected from the employing offices from time to time and curriculum along with other activities are planned and designed accordingly.

To ensure that the admitted and registered student clearly understand the requirements of their respective programmes and disciplines in order to qualify for the degree for which admitted and registered; information brochure is prepared and the students are advised to read the same. The brochure is provided both in hard and soft copy and is made available on the Institute website. Hard copy is also provided to the student at the time of registration.

The scope includes the selection process and procedures for admission, registration, fee structure, rules and regulations, and execution of programmes. The brochure provides detailed information about scheme of the courses and availability of respective course under each scheme. It clearly provides the information regarding core courses, program electives and open electives along with number of credits offered by these courses. YTC ensures that all courses meet the statutory and regulatory requirements of various national and international agencies



including UGC and AICTE. YTC is committed to facilitate for industry interaction and summer training to the students. YTC also provide resume services, training in personality management and extracurricular activities for overall development of the students. YTC also arranges short-term courses and expert lectures from the outside industry and these activities are also included in the scope of Student related processes.

To ensure the graduate attributes are met, the mapping of the curriculum with PO's and PSO' is done at the beginning of each semester and for the weakly addressed PO's and PSO's corrective action is taken.

8.2.3 Review of Requirements Related to Products and Services

For every programme run by the YTC, the resource requirements are reviewed from time to time based on the changing requirements of the employing organizations and major developments in the area of science, technology, and management. It is ensured that the YTC has the capability and the capacity to impart quality education and to produce competent engineers and professionals in all the programmes run by the YTC.

8.2.4 Changes to Requirements for Products and Services

YTC shall ensure that the relevant changes will be made in the documented information whenever necessary and the relevant persons shall be made aware of the changed requirements.

8.3 Design and Development of Products and Services

8.3.1 General

YTC plans and controls academic design and development activities and the qualities required in the passing out students. The scope includes the following for all the programmes/ services offered by the YTC.

- a) Curriculum design
- b) Detailed syllabi of all courses
- c) Logical sequence of courses including their pre-requisites
- d) Lecture plan and course files
- e) Review, verification, and validation that are appropriate to each design development stage
- f) Responsibilities and authorities for design and development



The responsibility for design control lies with the following:

Sr.No.	Activity	Responsibility
1	Identification, feasibility study and viability of new Programmes and Approval by AICTE/UGC for new programmes.	Principal/Dire, Board of Governance
2	Need Assessment, Design and Development of curriculum (For New as well as review of on-going program curriculum)	Faculty, HOD, DAB
3	Validation and approval of Design and Development	BOG, DAB
4	Accreditation by NAAC/ NBA/NIRF	IQAC Coordinator

8.3.2 Design and Development Planning

YTC ensures that the design and development activity is carried out in a planned manner. Design plans include the activities and sub activities including techniques & organizational interfaces and the time frame for completion. The plans are updated, as the instructional design evolves. Need analysis report (periodically or as per need) shall comprised of:

- Stated Student needs [Student Needs]
- Needs which the Student has yet not realized (Implied needs) [Graduate Attributes]
- Overall goals of Instructions [PO's, PSO's CO's,]
- Relevant standards as per requirement of AICTE and UGC guidelines. [Inputs from AICTE's Model Curriculum and UGC guidelines]
- General characteristics of target population [Classification of students weak-bright, domain specific]

8.3.3 Design and Development Inputs

The requirements of instructional design are determined and recorded. For instructional design, the input is taken from various sources. Input requirements are clearly understood and reconciled.

The design input may come from:

- Need analysis and Reviews
- Recommendations from alumni, senior management, and industry
- Success/failure reports of similar courses and programmes
- Published literature relevant to programmes



- Interaction with the industry

8.3.4 Design and Development Controls

The process of determining solutions to satisfy the identified needs is laid down and documented. Instructions are designed by incorporating these solutions. The analysis and mappings are recorded. The design output at this stage is taken as the initial design for subsequent reviews.

Review: Reviews are conducted at defined stages of the curriculum design, in which Board of Studies members, Academic Council members, as well as experts from the peer group from within and/or outside the YTC are engaged. Records of the reviews are maintained and the design is updated and brought into document control for revision based on these reviews. The design reviews are carried out at the end of each of the following stages using prescribed check lists:

- Need analysis
- Design and review by BOS
- Review by AC
- Review by Industry experts
- Review by alumni
- Review by senior faculties of other Institutes

Verification: Verification of design is conducted by comparison of the design with similar courses run by prestigious Universities. Evolved designs are also verified by taking independent opinion of the experts from the peer group from within or outside the YTC. The new curriculum is introduced only after adequate verification.

Validation: New/revised curriculum and instructional design is made applicable to the prospective students. The curriculum is validated in the initial stages of its introduction by taking a close feedback from students and faculty members regarding the effectiveness and applicability of the curriculum, with regard to the documented needs. Necessary changes, if required, are made to ensure that the design conforms to defined needs of the students. Additional instructional sessions and allied inputs are arranged for students/participants whenever required.

8.3.5 Design and Development Outputs

The output of instructional design and development is documented in the form of a report. Through various reviews and verifications, it is ensured that the design output meets the design input requirements. The design output report includes



- The types and levels of skills and knowledge to be imparted
- Details of need analysis and mappings at various stages
- Scheme of courses and the detailed syllabi
- Instructional strategies
- Selection of instructional aids for delivery.
- Assessment and evaluation.

The output documents like curriculum and instructional strategies are reviewed and approved before release at various levels and stages.

8.3.6 Design and Development Changes

Design changes are made based on need. The need is identified through the feedback from the students and/or analysis of data of their performance. Periodic design changes are also affected to offset the obsolescence of the design or if a need for change is realized. All the steps as required for initial design & development are followed for effecting and incorporating changes. Review is carried out and changes are documented. Records of the results of the review are maintained.

8.4 Control of Externally provided services

8.4.1 General

YTC has made arrangements to ensure hiring of faculty, officials and staff as per laid down norms and procurement of physical infrastructure conforming to laid down standards and specified requirements. The Purchase section has a quality procurement policy. The important Consideration in purchase of Goods or services are

- Quality
- Reliability
- Efficiency
- Accountability
- Economy

Efforts are being made to ensure placement of contract/ Purchase Order within the original validity of the quotations. Specified quality and reliability of the supplier has to be taken into consideration with low cost involvement. However low cost will not always be the sole criteria of purchase, since the cheapest may not always be the best.

The scope and key responsibilities under purchasing includes:

Principal/Director, YTC

- Hiring of faculty, officials, technical and other staff



(b) All administrative approval irrespective of purchase value.
(c) All expenditure sanction beyond delegated financial power of Principal and HOD's and respective cell coordinators.

(d) Purchase of physical infrastructure for general purchases e.g. office furniture and equipment, consumable like stationery and Housekeeping items.

Hiring of manpower and purchase of physical infrastructure are carried out in such a way that ensures quality of product as well as satisfaction of laid down norms & financial powers. Delegated power, if any, including regulatory requirements have been specified and are adhered to. Purchase activity may be conducted through any of the following modes:

(a) Hiring of manpower:

All regular appointments shall be through the regulations of DBATU, Lonere and advertisement published in newspaper/magazines and/or through search committees constituted for the purpose. Subsequently, duly constituted selection committees as per the laid down criteria shall hold interviews. Selection shall be made on merit. Temporary appointments, if needed, shall be, made on the recommendation of HOD's with subsequent approval by the prescribed appropriate authority.

(b) Purchase of physical infrastructure

Based on the urgency, expenditure involved and nature of stores to be purchased, various methods of procurement are to be followed:

- (a) Purchase of Goods through quotation.
- (b) Purchase of Goods by Purchase Committee
- (c) Purchase of Goods by obtaining bids
- (d) Purchase of Goods by Tender Enquiry

(c) Evaluation of purchased physical infrastructure:

For regularly purchased high value/ high volume items, the subcontractors shall be evaluated to assess their ability to meet subcontract requirements through:

- Initial evaluation
- Post approval Periodic evaluation.

Evaluation process shall be based on one or more of the following criteria:

- Inspection & Evaluation of subcontractor's quality system.
- Evaluation of product/material.
- Contractors past history & quality rating, wherever available.



Items/product wise list of approved subcontractors shall be maintained in the department. Control shall be exercised on the contractors depending on the criticality of the product through product classification and the past experience and quality rating (if available) of the contractors.

(d) For Guest/Visiting faculty/trainer hiring:

For augmenting the faculty in deficient area or in case of an emergent need, faculty services shall be hired from outside, based on a specified evaluation process and as per laid down criteria.

(e) For student's Industry supported project/internship:

Identification of prospective industries/organizations where students shall be placed for project semester evaluation, shall be carried out based on following considerations:

- Industry/ Organization's reputation, corporate image and market reputation.
- Sales turnover and Number of employees.
- Qualifications of personnel at the executive level.
- Nature of Projects that can be undertaken / offered.
- Support Facilities offered by the organization

8.4.2 Type and Extent of Control of External Provision

Following controls are adopted by the YTC for the externally provided product and services.

(a) Verification of hired manpower:

Hired manpower shall be periodically appraised as per documented procedures during probation and before confirmation as well as thereafter to ensure that they meet all specified requirements.

(b) Verification of purchased physical infrastructure:

The verification of purchased physical infrastructure shall be carried out and records thereof shall be maintained.

(c) Verification of purchased product at the premises of contractor:

Wherever specified in the purchase data, the machinery, equipment and other items shall be inspected by the faculty and technical staff and verified at the contractor's premises

(d) Records

All purchase records shall be maintained as per documented procedures.

8.4.3 Information for External Providers

Purchase documents have been designed to include all product/service specific acceptance criteria, cost details, requirements of qualifications of personnel and the quality management system requirements.



8.5 Product and Service Provision

8.5.1 Control of Production and Service Provision

The Instructional process in the YTC is planned, documented, and executed under controlled conditions for the attainment of desired goals and program educational objectives. The major components of the instructional process to be controlled are:

Sr.No.	Scope	Responsibility
1	Need Assessment	Faculty, HOD, PAC, Dean Academics
2	Instructional Design & Development	Faculty, HOD, PAC, BOS, Dean Academics
3	Imparting Instructions/ Teaching	Faculty, Time table In-charge, HOD, Dean Academics
4	Conduct of Examinations-MSE, ESE, Supplementary Exams	Controller of Examination
5	Conduct of Examinations-CA/ISE, Assignments, Weak-Bright Test	Faculty, HOD
6	Outcome Measurement/ Evaluation	Faculty, HOD
7	Major support processes like administration, co-curricular activities, library, sports and extracurricular activities	Respective Cell Coordinator
8	Short Term Courses	Faculty, HOD
9	Ensuring Quality in teaching-learning process and feedback	Faculty, HOD, Dean Academics

The control of instructional process in the YTC includes the following:

- Planning & execution of instruction as per curriculum needs for core and professional courses, with or without laboratory component, in compliance with references/codes designed curriculum and guidelines of UGC/ AICTE/ NBA.
- Ensuring adequacy of qualified and trained manpower and physical infrastructure according to designed curriculum and class strength.
- Provision of requisite material support such as (i) Class rooms with proper seating arrangements, White boards, marker, chalkboard, audio visual aids (ii) Laboratories



equipped with Machines, equipment, tools, instruments, test samples, consumable and (iii) Library having Text books, reference books journals/video cassettes and other referral material.

- Maintenance of equipment and facilities to ensure their continued availability and process capability. This includes the machines, equipment and instruments/ tools in the workshops and laboratories used in the instructional process as well as availability and use of monitoring and measuring equipment
- Planning and undertaking Industrial/ educational visits.
- Placement, training and evaluation of students for Project Semester in private/ public sector/ industry/ organizations.
- Continuous monitoring and maintenance of instructional process parameters.
- Monitoring and control of any deviations of product qualities or process parameters from design specifications.
- Planning, execution and control of the following co-curricular/ extracurricular activities to achieve the quality objective w.r.t. development of personality & physical/ mental fitness of students.
- Professional & literary societies organizing specialized seminars, quizzes, contests, group discussions, panel discussions, interaction between students, teachers and staff members for improving general skills of communication and presentation.

All educational & training processes are special processes, as their quality cannot be measured immediately after delivery. Instructional process and plan is accordingly documented. Duly qualified and trained faculty & technical staff are assigned the responsibility of imparting instructions to ensure desired results.

8.5.2 Identification and Traceability

YTC has made arrangements for identification of students & ensures traceability of data related to them throughout the realization process. The scope includes the following:

Sr. No.	Scope	Responsibility
1	Students Original certificates	Registrar
2	Roll No., which provides information about their batch, branch and a unique Roll number	Registrar
3	Semester Registration Record	Registrar
4	Identity Card issued to all registered students	Registrar
5	Library Card	Librarian



6	Student Attendance record	Class Teacher, HOD
7	Student Performance record-Result Analysis, CA, MSE, ESE, Weak Bright, Assignment	HOD, Dean Academics
8	Placement Record	Department placement coordinator, Training and Placement Officer

Each department shall maintain identification & traceability of registered students in their respective disciplines and will have appropriate records

8.5.3 Property belonging to Student or external Providers

YTC has made arrangements for verification, storage and maintenance of Student supplied product, provided for incorporation into the supplies or for related activities. The scope shall include:

- Items supplied by the Student (students) for evaluation.
- Items supplied by the Student during consultation/ testing/ short term customized training programmes.

The responsibility for Student property is as under:

Sr.No.	Scope	Responsibility
1	Students Original certificates	Registrar
2	Tutorial & Assignments	Faculty, Lab in-charge, HOD
3	Laboratory Journal/Note Books	Faculty, Lab in-charge, HOD
4	Report of Project, Mini-Project and seminar work	Project Coordinator, HOD
5	Sample Answer Books	Faculty, HOD, Department Exam Coordinator and COE

Arrangements have been made for the following:

- (a) Receipt, verification & return of original certificates.
- (b) Receipt, evaluation & return/ preservation of laboratory note books, tutorials and home assignments.
- (c) Receipt, evaluation, return/ preservation of mid semester tests and end semester examination answer books.



8.5.4 Preservation

The product in the case of educational Institution is the students. Most of the preservation part of this part has been dealt with in various clauses. In addition to these, the YTC has also made arrangements for taking care of the students and their well-being by the following:

- (a) Maintaining discipline in the campus including Campus, hostels and play grounds.
- (b) Making arrangements for games, sports and other facilities for keeping them in good health.
- (c) Making available the health center facility.
- (d) Counselling to students who need it.
- (e) Maintaining hygiene in hostel messes, college canteen and water coolers etc.
- (f) Displaying and providing safety instructions for working in laboratories

8.5.5 Post Delivery activities

YTC maintains documented information of all products delivered to their Students. YTC conducts post-delivery activities but not limited to the following:

- 1. Collaborating with different industries for student placements
- 2. Employers feedback and corrective action
- 3. Need assessment and imparting training for student
- 4. Utilizing employer's feedback for enhancement of existing curriculum and improvement of the delivery of instruction
- 5. Utilizing alumni's feedback for enhancement of existing curriculum and improvement of the delivery of instruction

8.5.6 Control of changes

The feedback received is used to decide the changes in the process to meet the Student requirements. All such decisions are documented and approved by authorized body.

8.6 Release of products and services

The product/ services is released only after meeting the acceptance criteria and approved by the relevant authority. The evidence of the conformity to the acceptance criteria is documented and preserved which is also traceable. YTC ensures that the Students are equipped with knowledge, skills, attitudes and values and competence as shown by satisfactorily complying with all the requirements of their curricular programs. Evaluation and assessment are undertaken at appropriate stages to verify that the curricular program requirements are met before the conferment of degrees.



8.7 Control of non-conforming processes outputs, products and services

Documented procedures have been established to ensure that non-conforming students or items of physical infrastructure are prevented from further processing and that their control provides for identification, documentation, evaluation and disposition under intimation to all concerned.

The scope and responsibility for conduct of non-conforming product includes:

Sr.No.	Scope	Responsibility
1	Non-conformance identified during revision & verification of course design	Dean Academics, HOD
2	Students' performance below the specified requirements during the instructional process	Faculty, Result analysis in-charge, HOD, Dean Academics
3	Instructional delivery not conforming to specifications	Faculty, HOD, Dean Academics
4	Materials and services not conforming to the specified requirements	Principal, Registrar, HOD

Documented procedures include the following:

- ii. Student whose performance is below the specified requirement are identified and listed separately. Procedure for identifying such students, referring them to counseling through designated counsellors, heads, course coordinator, Dean Academics has been established.
- iii. Feedback regarding conduct of courses is obtained from students through "Course End Response Survey", Lab End Survey conducted by course coordinator each semester. A specially designed object oriented Performa is used for getting this feedback.
- iv. Rating of faculty on course, instruction, tutorial, practical & misc. items is reported in descending order of instructions & feedback is sent to individual faculty member for improvement. Students are also encouraged to give informal feedback during instruction process. In addition, if any non-conformance is noticed during inspection or periodic audit of the process, the same is corrected.
- v. Physical infrastructure if found non-conforming, is corrected or disposed of as per documented procedure.



8.7.1 Review and disposition of non-conforming product

Documented procedures also address the aspects of review and disposition of the nonconforming product. The outline of these procedures is given below:

- i) The students whose performance has not been up to the mark are counselled, their performance discussed in the Department Academic Committee Meeting and a suitable corrective action taken which may include. Provision of additional opportunities to improve and conform to requirements.
- ii) Regarding non-conformance of instructional performance with the instructional design or non-conforming performance of the course coordinator, action is taken based on a documented procedure/norms & rules of the YTC and University. Actions entail giving memos to the concerned instructor and/or planning and implementing a corrective action under intimation to Head.
- iii) Regarding physical infrastructure disposition of non-conforming product is carried out by taking up and examining the matter at the appropriate level. Action may include maintenance or rejection of goods or services.



Clause 9: Performance Evaluation

9.1 Monitoring, Measurement, Analysis and Evaluation

9.1.1 General

YTC applies suitable methods for monitoring and measurement of processes of quality management system. This monitoring and measurement demonstrate the ability of the processes to achieve planned results. The established methods include:

- i. Maintenance of course file and lecture plan by every teacher. The checklist of the documents to be attached and their order is prepared.
- ii. Filling up of course coverage Performa by each teacher and its counter checking by head of the department.
- iii. Surprise checks by HOD and Dean Academics to ensure that classes are held.
- iv. Maintenance of attendance records and declaration of short attendance list at timely intervals.
- i) Assignments/tests to be submitted for internal assessment in addition to the mid Semester and end Semester Examinations.

9.1.2 Student Satisfaction

YTC has created well developed system for monitoring progress, evaluating and providing valuable feedback to ensure that the processes meet Student requirements and the information is collected using the following established mechanism:

- Student Feedback is regularly taken on matters related to delivery of instruction, courses taught, industry application and overall relevance.
- Feedback on industry requirements is collected from different companies and organizations coming for the campus placements.
- Feedback from students after they spend internship in industry.
- Feedback from Alumni
- Feedback from parents
- Rubrics

The information thus collected is summarized, and analyzed and the results of the analysis are used as a feedback to further improve the system. Heads of departments review the feedback and specify guidelines for further improvement wherever applicable.



9.1.3 Analysis and Evaluation

YTC has made arrangements for evaluating and meeting the specified requirements for students at entry, during the instructional process and finally before qualifying for award of degree as well as for other physical infrastructure so that accepted students, instructions & materials are processed further. Finishing schools and Remedial Classes are organized for weaker students in every semester.

The scope and responsibility for monitoring and measurement of product is as under:

Sr.No.	Scope	Responsibility
1	Entrance/Eligibility examination	JEE / MH CET/ GATE in charge
2	Weak-Bright Identification Test	Dean Academics, HOD, Course Coordinator
3	Course Examination	Dean Academics, HOD, Course Coordinator, Controller of Examinations
4	Continuous evaluation as conducted during the process	Dean Academics, HOD, Course Coordinator
5	Summative evaluation at the end of the Semester	Dean Academics, HOD, Course Coordinator
6	Inward and in-process inspection Lab Manuals and Equipment history records	Dean Academics, HOD, Course Coordinator, Laboratory Assistant

Following types of evaluation is performed by the YTC.

(a) Entrance/eligibility examination

Admissions to various undergraduate programmes are made through JEE / MH CET/ GATE entrance examination conducted by competent authorities of state and central government. Eligibility information for each programme is contained in the University, DTE, AICTE Rules and Regulations and also in the Information Brochure issued every year.

(b) Formative evaluation as conducted during the instruction Process

The instruction process shall be reviewed & verified for adequacy. Continuous evaluation of students shall be carried out through examinations and/or other modes during delivery of instructions. The evaluation process shall include:



- ii. Course plan and Lecture plan to ensure that instructors & tutors follow a laid down plan for imparting instructions.
- iii. Weak Bright Identification Test, In Semester Exam, Mid semester Exam, End Semester announced or unannounced quizzes and practical viva-voce examinations.
- iv. Evaluation of home assignments, laboratory work, tutorial work and participation in class discussion/seminars etc.
- v. Mid Semester, End Semester Examination, Re- End Semester Examination, 100% Examination conducted by COE office for all undergraduate & post graduate courses in which student is registered each semester as per established documented procedures.

(c) Summative evaluation at the end of the instruction process

A mechanism has been established and is used to review and verify that the students have completed (fulfilled) all requirements for the award of the degree.

Inspection of all physical infrastructures procured by the YTC for use in instructional process or for further processing shall be carried out as per documented procedures. The records of inspection & testing shall be maintained as per documented procedures. Evidence of conformity with the acceptance criteria is maintained.

YTC has made arrangements to determine, collect and analyze appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made. This includes data generated as a result of monitoring and measurement and from other relevant sources. The analysis of data provides information related to Student satisfaction, conformity to product requirements characteristics trends of products including opportunities for preventive action and suppliers. Presently analysis of data is being carried out in the following areas:

Sr.No.	Scope	Responsibility
1.	Success rate	HOD, Dean Academics
2.	Attrition rate	HOD, Dean Academics
3.	Student Response Survey-Feedback on Facilities, Feedback on teaching and learning, Rubrics	Registrar, Dean Academics, HOD, Course Coordinator
4.	Student participation in co-curricular and extra-curricular activities	Faculty and Student Welfare coordinators



5.	Analysis of effectiveness counseling	Faculty and Student Welfare coordinators
6.	Campus Interview records and co-relation with students performance	Training and Placement officer, HOD

9.2 Internal Audit

YTC conducts internal audits every year to verify whether established QMS are followed to determine effective implementation. A team of internal auditor carry out the audit in a planned manner.

The scope covers all activities of the quality system affecting quality of the instruction. The responsibility of scheduling internal quality audits lies with the IQAC. The arrangements made for conducting internal audits are:

- ii. Documented procedure to define the responsibility and requirements for planning and implementing internal quality audits has been established and maintained.
- iii. The frequency of the internal quality audits has been decided based on the status and importance of the activity but in no case the frequency shall be less than once in a year.
- iv. The audit of an area/ activity would be carried out by trained personnel other than those directly responsible for the said activity.
- v. The results of the internal quality audits are recorded and report is given to concerned functional Head.
- vi. Timely action on the reported non-conformities is planned and taken by concerned functional Head.
- vii. Follow-up audit if required is conducted in-order to verify and record the implementation and effectiveness of the corrective action(s) taken.
- viii. The results of the internal quality audits are sent for management review and recorded.
- ix. The selection of auditors and conduct of audits is made so that it ensures the objectivity and impartiality of the audit process. Auditors do not audit their own work.



9.3 Management Review

9.3.1 General

The review of the quality system shall be carried out once in every six months or in a year based on requirement to ensure continuing suitability, adequacy and effectiveness in satisfying the requirements of the standard and the quality policy of the YTC. The review includes assessing opportunities for improvement and the need for change to the quality management system. Reviews shall be carried out based on the inputs for the review period from the following sources as Inputs:

9.3.2 Management Review Inputs

- (a) Action taken report on the previous management reviews
- (b) Results of Internal quality audits
- (c) Results of student's performance in various examinations
- (d) Result of Students Response Survey
- (e) Feedback from Industry, Alumni, participating organizations in campus placement and other concerned sources
- (f) Details of corrective/preventive actions
- (g) Improvement programmes suggested/recommended
- (h) Training programmes launched
- (i) Review of quality policy and objectives
- (j) Changes that could affect the QMS

9.3.3 Management Review Outputs

The output from the Management Review is in the form of an 'Action Plan', which includes actions to be taken, responsibility, target date, resource requirements etc. related to

- (a) Improvement of the effectiveness of QMS and its processes
- (b) Improvements in products related to Students
- (c) Resources needed

The management representative keeps the record of management review



Clause 10 Improvement

10.1 General

YTC top management determines and selects opportunities for improvement and implements necessary actions to meet client requirements and enhance client satisfaction. These include:

- g. Improving products and services to meet requirements as well as to address future needs and expectations;
- h. Correcting, preventing or reducing undesired effects;
- i. Improving the performance and effectiveness of the QMS.

10.2 Nonconformity and Corrective Action

YTC takes action to ensure that the recurrence of non-conformities or discrepancies, which are reported to have occurred at some point of time or which are likely to occur, are prevented. This is ensured by analyzing the problem, finding its root cause and eliminating it. The scope includes:

Sr. No.	Scope	Responsibility
1	Student (students) Feedback/ complaints/suggestions/ comments	HOD
2	Success/Failure rates	HOD, Dean Academics
3	Non-conformities reported in instructional design and/or delivery	HOD, Dean Academics
4	Non-conformities in use of physical infrastructural facilities	Registrar, HOD, Laboratory In-charge
5	Non-conformities as a result of Internal Quality Audit	IQAC Coordinator

Documented procedure has been established for the following:

- a. To handle Student (students) complaints, suggestions & comments, feedback from, other sources like industries, companies coming for campus recruitment etc. and reports regarding product non-conformities, if any.
- b. To review the non-conformity and investigate the cause of reported non-conformities and recording the results of the investigation.



- c. To evaluate the need for action, determining and implementing the decision to take corrective action effectively in-order to eliminate the cause of non- conformities and recording the results.
- d. To apply controls in-order to ensure non-recurrence of reported non-conformities.
- e. Review the effectiveness of the corrective action taken.
- f. Corrective action taken to ensure conformity is decided according to the degree of the problem and commensurate with the risks involved. Actions taken include revision of course by external subject experts [from Industry and or Academia] in BOS meetings and review by Academic Council meeting. Any change in method of delivery of instruction or instructor may be carried out in response to the feedback received.

10.2.1 Preventive Action:

YTC determines action to eliminate the causes of potential non-conformities in order to prevent their occurrence. Preventive action is appropriate to the effects of the potential problems. A documented procedure has been established which includes:

- (a) Prior planning and adequate preparation to ensure that processes move in right direction.
- (b) To analyze information pertaining to feedback received through student satisfaction survey, result of students, CGPA levels of class, feedback from the companies who came for campus recruitment and other such sources with a view to determine potential non-conformities.
- (c) To determine steps needed to deal with any problem requiring preventive action.
- (d) To initiate preventive action and to apply controls to prevent non-conformities.
- (e) To confirm that relevant information on actions taken to prevent non-conformities is submitted for management review.
- (f) Recording the results of action taken and reviewing the preventive action.
- (g) Review the effectiveness of the preventive action taken.

Any changes made to the procedures resulting from corrective and preventive action are recorded and implemented.

10.3 Continual Improvement

YTC continuity improves the effectiveness of the quality management system through the use of quality policy, quality objectives, Attainment of PEO's, PO's, PSO's, audit results, analysis of data, corrective and preventive actions and management review. At the time of



every management of review, through the measure of each objective and its comparison with earlier level of that objective, the trends are ascertained. Action points are then listed to continually improve the system. The status is reviewed in the subsequent management review meetings.

Approval

Prepared by:

Dr. N. M. Jamadar
Dean, IQAC

Signature: _____



Approved by:

Dr. Vikram S. Patil
Director
Yashoda Technical Campus, Satara

Signature: _____

