

SYLLABUS/
CURRICULUM



PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

(Approved by AICTE & Affiliated to Anna University, Chennai)

Madurai - Sivagangai Highway, Arasanoor, Thirumansolai Post, Sivagangai Dt. - 630 561, Tamilnadu
Mobile : 9842102628, 7373002628 Email: info@psyec.edu.in Website : www.psyec.edu.in

City Office : 10, Pandian Saraswathi St, Sivagami Nagar, Narayanapuram, Madurai - 625 014. Telefax- 0452 2682338, Mobile : 98423-02628

DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

VACCE2122QC - Quality Control in Manufacturing and Services

OBJECTIVE OF THE COURSE

- Understand the principles and concepts of quality management, including its history, evolution, and importance in various industries
- Analyse different quality management systems, such as ISO 9001, Six Sigma, and Total Quality Management (TQM), and evaluate their applicability in different organizational contexts

Chapter 1

5

The overview of quality management principles, concepts, and historical evolution - the importance of quality in organizational success - the impact of quality management on customer satisfaction - competitive advantage. - the definition of quality, key quality management - the evolution of quality management systems.

Chapter 2

6

The various quality management systems such as ISO 9001, Six Sigma, Total Quality Management (TQM) - Lean Manufacturing. principles, methodologies, and implementation strategies of system. Case studies

Chapter 3

6

Practical tools - Various techniques used in quality management - problem-solving methods, process improvement, and decision-making. Various tools of Pareto charts, Ishikawa diagrams, control charts, statistical process control (SPC), and root cause analysis

Chapter 4

6

Quality assurance (QA) and quality control (QC), activities - Types of organization. the processes and practices in Qc - products or services - quality standards - quality planning, quality audits, inspection methods.

Chapter 5

6

The concept of continuous improvement - the fundamental principle of quality management Kaizen, Lean Six Sigma, and Plan-Do-Check-Act (PDCA) cycle. Various opportunities for improvement, implement changes- measure outcomes to achieve incremental enhancements in quality and efficiency.

Chapter 6

6

The importance of customer satisfaction - The engagement in quality management. Various techniques in customer feedback - analysing customer needs and expectations - the implementing strategies to enhance customer experiences.

TOTAL HOURS:35



Course-Coordinator



HOD



PRINCIPAL



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DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

VACCE2122QC --Quality Control in Manufacturing and Services

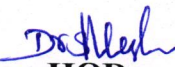
Course Schedule

Date	Time	TOPICS
10/03/2022	9.00 am to 12.15 pm	The overview of quality management principles, concepts, and historical evolution - the importance of quality in organizational success - the impact of quality management on customer satisfaction -competitive advantage. - the definition of quality, key quality management - the evolution of quality management systems.
	1.00 pm to 4.15 pm	
11/03/2022	9.00 am to 12.15 pm	The various quality management systems such as ISO 9001, Six Sigma, Total Quality Management (TQM) - Lean Manufacturing. principles, methodologies, and implementation strategies of system. Case studies
	1.00 pm to 4.15 pm	
12/03/2022	9.00 am to 12.15 pm	Practical tools -Various techniques used in quality management - problem-solving methods, process improvement, and decision-making. Various tools of Pareto charts, Ishikawa diagrams, control charts, statistical process control (SPC), and root cause analysis
	1.00 pm to 4.15 pm	
13/03/2022	9.00 am to 12.15 pm	Quality assurance (QA) and quality control (QC) activities – Types of organization. the processes and practices in Qc - products or services - quality standards - quality planning, quality audits, inspection methods.
	1.00 pm to 4.15 pm	
14/03/2022	9.00 am to 12.15 pm	The concept of continuous improvement - the fundamental principle of quality management Kaizen, Lean Six Sigma, and Plan-Do-Check-Act (PDCA) cycle. Various opportunities for improvement, implement changes- measure outcomes to achieve incremental enhancements in quality and efficiency.
	1.00 pm to 4.15 pm	
15/03/2022	9.00 am to 12.15 pm	The importance of customer satisfaction – The engagement in quality management. Various techniques in customer feedback - analysing customer needs and expectations - the implementing strategies to enhance customer experiences.
	1.00 pm to 4.15 pm	

Tea Break : FN- 11:00 am to 11:15am & AN-03:00 pm to 03:15 pm
Lunch : 12:15 pm to 01:00pm

Total Hours :35


Course-Coordinator


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DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

VACCE2122QC - Quality Control in Manufacturing and Services One-page Report

Name of the course : **Quality Control in Manufacturing and Services**
Development Course Code : **VACCE2122QC**
Course Coordinator : **Mr. S SASTHA ARUMUGA PANDI AP/Civil**
Date/Duration : 10-03-2022 to 15-03-2022— **35 hours**

I here affirm that the third-year students of strength 20 have been taught the value-added course title “**Quality Control in Manufacturing and Services**” as per the syllabus and completed within the stipulated time duration.

I confirm that the value-added course titled “**Quality Control in Manufacturing and Services**” has been conducted in the beginning of the semester and course delivery along with the attendance of the students was recorded.

I confirmed that all the students were actively participated in the course and the eligible students were certified for the course.


Course-Coordinator


HOD


PRINCIPAL

ASSESSMENT PROCEDURE

PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

ARASANOOR-630561

DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

VACCE2122QC - Quality Control in Manufacturing and Services

Assessment Questions with Answer

1. What is the primary goal of quality management?

- A) Maximizing profits
- B) Minimizing costs
- C) Satisfying customer requirements**
- D) Expanding market share

2. Which of the following quality management systems focuses on continuous improvement and customer satisfaction?

- A) ISO 14001
- B) ISO 27001
- C) ISO 9001**
- D) ISO 22000

3. Which quality management methodology aims to reduce variation and defects by employing statistical analysis?

- A) Total Quality Management (TQM)
- B) Lean Six Sigma**
- C) Kaizen
- D) 5S Methodology

4. What does the acronym "TQM" stand for in quality management?

- A) Total Quantity Management
- B) Total Quality Measurement
- C) Total Quality Management**
- D) Total Quality Monitoring

5. Which of the following is NOT one of the seven basic quality tools?

- A) Scatter Diagram
- B) Histogram
- C) Ishikawa Diagram (Fishbone Diagram)
- D) Gantt Chart**

6. Which quality management principle emphasizes the importance of fact-based decision-making?

- A) **Customer Focus**
- B) Leadership
- C) Involvement of People
- D) Process Approach

7. What does the term "Kaizen" mean in the context of quality management?

- A) **Continuous Improvement**
- B) Total Quality Management
- C) Quality Control
- D) Quality Assurance

8. Which of the following is NOT a component of the DMAIC methodology in Six Sigma?


- A) Define
- B) **Monitor**
- C) Analyse
- D) Control

9. What is the purpose of a Pareto Chart in quality management?

- A) **To identify the most important factors contributing to a problem**
- B) To visualize the distribution of data
- C) To monitor process performance over time
- D) To analyse cause-and-effect relationships

10. Which of the following is a key principle of Total Quality Management (TQM)?

- A) Inspection is the primary means of quality control
- B) Quality is the responsibility of the quality control department only
- C) **Continuous improvement is essential for long-term success**
- D) Customer satisfaction is secondary to meeting production targets


Course-Coordinator


HOD


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PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE
ARASANOOR-630561

DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

VACCE2122QC - Quality Control in Manufacturing and Services

Assessment Test Paper

REGISTER NUMBER: 912019103003

NAME OF THE STUDENT: ARUNKUMAR K

9/10

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Course-Cordinator


HOD


PRINCIPAL

PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE, ARASANOOR 630561
DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

Student Performance Sheet

Period of course: 10.12.2021-15.12.2021

Duration of Course: 35 hours

VACCE2122QC - QUALITY CONTROL IN MANUFACTURING AND SERVICES

Sl. No	Register Number	Student Name	Assessment Marks
1	912019103001	ABIMANYU V	89
2	912019103002	ALLAN JONES A	92
3	912019103003	ARUNKUMAR K	90
4	912019103004	BALAJI G	96
5	912019103005	CHANDRA BOSE S	75
6	912019103007	GAUTHAM M	88
7	912019103009	GURUNATHAN K	88
8	912019103012	KAVIN KUMAR S	81
9	912019103014	NAGARAJ M	86
10	912019103015	PRABU P	89
11	912019103016	RAGUL S	84
12	912019103017	RAHUL P	81
13	912019103018	RAJESH G	87
14	912019103019	RATHINESHWARAN R	95
15	912019103020	SAKTHI SUNDAR C	91
16	912019103021	SEEMAN T	94
17	912019103022	THIRUKKURALARASA N D	79
18	912019103023	VASANTH L	81
19	912019103301	PRIYADHARSHINI M	82
20	912019103501	ARUNKUMAR N	88


Course Coordinator


HOD


Principal

Enrollment
Student Name
List

PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE, ARASANOOR 630561
DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

Student Registration Sheet

Period of course: 10.12.2021 to 15.12.2021

Duration of Course: 35 hours

VACCE2122QC - QUALITY CONTROL IN MANUFACTURING AND SERVICES

Sl. No	Register Number	Student Name	Signature of the student
1	912019103001	ABIMANYU V	Abimanya
2	912019103002	ALLAN JONES A	Allan
3	912019103003	ARUNKUMAR K	K. Arun
4	912019103004	BALAJI G	Dr. Balaji
5	912019103005	CHANDRA BOSE S	chandra bose
6	912019103007	GAUTHAM M	M. Gautham
7	912019103009	GURUNATHAN K	Gurunathan
8	912019103012	KAVIN KUMAR S	Kavin
9	912019103014	NAGARAJ M	Nagaraj
10	912019103015	PRABU P	P. Prabhu
11	912019103016	RAGUL S	Raghu
12	912019103017	RAHUL P	Rahul
13	912019103018	RAJESH G	Rajesh
14	912019103019	RATHINESHWARAN R	R. Rathin
15	912019103020	SAKTHI SUNDAR C	Sakthi Sundar
16	912019103021	SEEMAN T	Seeman
17	912019103022	THIRUKKURALARASA N D	Thirukkur
18	912019103023	VASANTH L	Vasanth
19	912019103301	PRIYADHARSHINI M	Priya
20	912019103501	ARUNKUMAR N	Arun

[Signature]

Course Coordinator

[Signature]
HOD

[Signature]
Principal

STUDENTS ATTENDANCE

PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE, ARASANOOR 630561
DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2021-2022

Student attendance Sheet

Period of course: 10.12.2021-15.12.2021

Duration of Course: 35 hours

VACCE2122QC - QUALITY CONTROL IN MANUFACTURING AND SERVICES

Attendance Sheet			Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Sl. No	Register Number	Student Name	09.00 am - 04.15 pm	09.00 am - 04.15 pm	09.00 am - 04.15 pm	09.00 am - 04.15 pm	09.00 am - 04.15 pm	09.00 am - 04.15 pm
1	912019103001	ABIMANYU V	ABV	ABV	ABV	ABV	ABV	ABV
2	912019103002	ALLAN JONES A	AJ	AJ	AJ	AJ	AJ	AJ
3	912019103003	ARUNKUMAR K	AK	AK	AK	AK	AK	AK
4	912019103004	BALAJI G	BG	BG	BG	BG	BG	BG
5	912019103005	CHANDRA BOSE S	CS	CS	CS	CS	CS	CS
6	912019103007	GAUTHAM M	GM	GM	GM	GM	GM	GM
7	912019103009	GURUNATHAN K	GK	GK	GK	GK	GK	GK
8	912019103012	KAVIN KUMAR S	KS	KS	KS	KS	KS	KS
9	912019103014	NAGARAJ M	NM	NM	NM	NM	NM	NM
10	912019103015	PRABU P	PP	PP	PP	PP	PP	PP
11	912019103016	RAGUL S	RS	RS	RS	RS	RS	RS
12	912019103017	RAHUL P	RP	RP	RP	RP	RP	RP
13	912019103018	RAJESH G	RG	RG	RG	RG	RG	RG
14	912019103019	RATHINESHWARAN R	RR	RR	RR	RR	RR	RR
15	912019103020	SAKTHI SUNDAR C	CS	CS	CS	CS	CS	CS
16	912019103021	SEEMAN T	ST	ST	ST	ST	ST	ST
17	912019103022	THIRUKKURALARASA N D	NT	NT	NT	NT	NT	NT
18	912019103023	VASANTH L	VL	VL	VL	VL	VL	VL
19	912019103301	PRIYADHARSHINI M	PM	PM	PM	PM	PM	PM
20	912019103501	ARUNKUMAR N	AN	AN	AN	AN	AN	AN

Tea Break : FN- 11:00 am to 11:15am & AN-03:00 pm to 03:15 pm

Lunch : 12:15 pm to 01:00pm

Course Coordinator

HOD

Principal

MODEL
CERTIFICATES

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Arasanoor, Thirumansolai Post, Sivagangai – Madurai Highway, Tamilnadu – 630 561

Value added course on

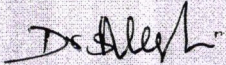
Quality Control in Manufacturing and Services

Organized by

DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE

This is to Certify that RAGUL.D from third year students has participated in the value-added course on **Quality Control in Manufacturing and Services** by the Department of Civil Engineering from 10.03.2022 to 15.03.2022 (35 Hours) at Pandian Saraswathi Yadav Engineering College, Sivagangai.


Dr. MEENAKSHI SUDARVIZHI
HOD


Dr. R. RAJA
PRINCIPAL

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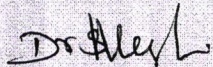
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Dr. MEENAKSHI SUDARVIZHI

HOD



Dr. R. RAJA

PRINCIPAL

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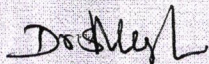
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Dr. MEENAKSHI SUDARVIZHI

HOD



Dr. R. RAJA

PRINICIPAL