SYLLABUS

Course Information					
Code:	**IIN63006**	Course:	**TOTAL QUALITY MANAGEMENT (TQM)**		
Coordination Area / Program:		**FAC. INGENIERÍA: ING. INDUSTRIAL Y COMERCIAL**		Mode:	**Presencial**
Credits: **03**		Tipo de hora	Presencial	Virtual	H. Totales
		H.Teoria	32	0	32
		H.Práctica	32	0	32
		H.Laboratorio	0	0	0
Period: **2024-01**		Start date and end of period: **del 20/03/2024 al 09/07/2024**			
Career: **INGENIERÍA INDUSTRIAL Y COMERCIAL**					

Note: The "Autonomous Learning Hours: **96**" text appears in the right column spanning the hour-type rows.

Course Pre-requisites		
Code	**Course - Credits**	**Career**
FC-AD-CDD ESTDESINF	ESTADÍSTICA DESCRIPTIVA E INFERENCIA ESTADÍSTICA	ING. INDUSTRIAL Y C.

Course Coordinators			
Surname and First Name	**Email**	**Contact Hour**	**Contact Site**
DIAZ SANCHEZ, FANNY KARINA	FDIAZS@USIL.EDU.PE		

Instructors
You can check the timetables for each teacher in their INFOSIL in the *Classes Development Teachers* option *Teachers.*

Course Overview
Total Quality Management is a theoretical and practical course that aims to use related concepts of quality, productivity, competitiveness, principles of quality management, foundations of quality management systems and its audit process, that allow to implement, certify and keep an effective quality management system seeking to improve the performance of an organization and the satisfaction of customers and other key stakeholders since quality management systems have become one of the basic pillars of any business strategy.

Professional and/or General Competencies

Career/Programm	Acronym/ Name of the Competence	Competence level	Expected learnings
Industrial and Commercial Engineering	CP5: Participation and Leadership in Engineering	N2 Demonstrates your ability to work in a team whose members together provide leadership, creating a collaborative and inclusive environment, to set goals, plan tasks, and meet short, medium, and long-term objectives.	The student has the ability to function effectively as an individual, as a member or leader in various teams, and in multidisciplinary environments.
	CG3: Research	N2 Carry out basic research work that contributes to scientific development, applying knowledge, skills and the logical and scientific method within the framework of ethics and	The student has the ability to conduct studies of complex engineering problems using inquiry-based knowledge and research methods including the design and conduct of experiments, the analysis and

		the lines of research of the University.	interpretation of data, and the synthesis of data to produce valid conclusions.
CP6: Data analysis for decision making		N2 Employs the necessary elements to close the gap between the needs of society and the accessibility of analytical models and tools, taking advantage of the opportunity to use data to improve decision-making, establishing workflows and interdependence of elements within a process industrial and commercial.	The student has the ability to identify, formulate, search for information and analyze complex engineering problems to reach well-founded conclusions using basic principles of mathematics, natural sciences, and engineering sciences.
CG1: Comprehensive Communication		N2 Prepare written academic texts and oral communications with a coherent structure and cohesive writing, which recognizes the selection and review of appropriate sources to communicate their ideas in an academic and/or social environment.	The student has the ability to communicate effectively, by understanding and writing effective reports and design documentation, making effective presentations, and transmitting and receiving clear instructions.

General Course Result	Unit Result
Understand principles of quality, describe and understand tools and techniques for quality and managing organizations for performance excellence.	1. Analyze the concept of quality in a specific situation, and in customers, workforce and processes.
	2. Analyze the most important tools and techniques for quality and understand how to apply them in an organization
	3. Organize work teams to accomplish quality goals in an organization to keep and improve quality standards.

Development of activities

Unit Result 1: *Analyze the concept of quality in a specific situation, and in customers, workforce and processes.*

Session 1: *Analyze the concept of quality in a specific situation, and in customers, workforce and processes.*		Semana 1 a 5
Learning Activities	**Contents**	**Evidence**
Study of definitions and concepts. Working in small groups to analyze cases and solve exercises. Working using Excel or similar software to analyze data.	Introduction to Quality Foundations of Quality Management Customer Focus Workforce Focus Process Focus	Solved exercises. Solved cases. Participation in forums. Written evaluations.

Unit Result 2: *Analyze the most important tools and techniques for quality and understand how to apply them in an organization*

Session 2: *Analyze the most important tools and techniques for quality and understand how to apply them in an organization.*		Semana 6 a 10
Learning Activities	**Contents**	**Evidence**
Study of definitions and concepts. Working in small groups to analyze cases and solve exercises. Working using Excel or similar software to analyze data.	Statistical Methods in Quality Management Design for Quality and Product Excellence Measuring and Controlling Quality Process Improvement and Six Sigma	Solved exercises. Solved cases. Participation in forums. Written evaluations. Presentation of an advance of final assignment.

Unit Result 3: *Organize work teams to accomplish quality goals in an organization to keep and improve quality standards.*		
Session 3: *Organize and direct work teams to accomplish quality goals in an organization to keep and improve quality standards.*		Semana 11 a 16
Learning Activities	**Contents**	**Evidence**
Study of definitions and concepts. Working in small groups to analyze cases and solve exercises. Working using Excel or similar software to analyze data.	Strategy and Performance Excellence Measurement and Knowledge Management for Performance Excellence Leadership for Performance Excellence Building and Sustaining Quality and Performance Excellence	Solved exercises. Solved cases. Participation in forums. Written evaluations. Presentation of final assignment

Methodology
The course will be developed based on the following methodologies: Aprendizaje basado en problemas , Aprendizaje basado en proyectos , Aprendizaje colaborativo , The course will be developed based on the following methodologies: sessions will address the presentation and discussion of the theoretical aspects of the topic at hand, with the opportunity to practice and apply the subject matter using case studies and problem-solving exercises.

Assessment System				
Each of the items of the evaluation scheme and the final grade of the course are rounded to whole numbers. The final grade of the course is the weighted average of the corresponding items: permanent evaluation, partial exam and final exam. The averages calculated components of the item 'Permanent Evaluation' will keep your calculation with 2 decimals.				

Type Evaluation	%Weighing	Observation	Week Assessment	Rezag.
Evaluación Permanente	**100**%			
Promedio de Evaluaciones	**30**%			
Evaluación 1		Se elimina la menor nota	Semana 4	No
Evaluación 2		Se elimina la menor nota	Semana 7	No
Evaluación 3		Se elimina la menor nota	Semana 12	No
Evaluación 4		Se elimina la menor nota	Semana 14	No
Sustentación	**35**%		Semana 15	No
Trabajo Final	**35**%	Producto Acreditable	Semana 16	No

Attendance Policy	
Total Percentage Absences Permitted	30%
Class attendance is mandatory. The student who reaches or exceeds the limit of thirty percent (30%) of absences in the course, defined by the total of effective hours, will be disqualified from taking the final evaluation, corresponding to said evaluation with a grade of zero (0). In hybrid classrooms, only synchronous virtual participation (via zoom) is allowed, up to a maximum of 50% of the total course.	

Basic Required Reading
[1] Patjane, J (2013). *Seis Sigma aplicada a procesos de manufactura. Reducción de defectos en producción de núcleos de rotor automotriz mediante la metodología japonesa.* (1ra). Editorial Académica Española.

[2] Gutiérrez, H (2014). *Calidad y productividad.* (4a ed.). McGraw-Hill.
[3] Montgomery, Douglas C (2011). *Control estadístico de la calidad / Douglas C. Montgomery.* (3ra ed.). Limusa : Wiley. e-books

References Supplementary
[1] Oakland, J (2003). *Total quality management : text with cases.* (3rd ed). Elsevier.

Prepared by:	Approved by:	Validated by:
DIAZ SANCHEZ, FANNY KARINA /	CANO ZAPATA, LUZ MARIA VICTORIA	Office of Curriculum Development
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