

**COLLEGE OF APPLIED INDUSTRIAL TECHNOLOGY  
(CAIT)**

# **Strategic Plan 2021-2025**

**Department of  
MECHANICAL ENGINEERING TECHNOLOGY (MET)**

According to the 2020 – 2025 Strategic Plan of CAIT, the MET department issues its own Strategic Plan for 2021 - 2025 from the position of strength of utilizing the resources of the department and the new privileged location of the college, seeking impetus to address the most pressing issues through belonging, leadership, excellence, and collaboration



**2021**

**Quality Assurance Unit  
College of Applied Industrial Technology (CAIT)  
February, 2021**



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## **Committee of the Strategic Plan for MET**

### **Committee Supervisor**

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## Executive Summary

The first Strategic Plan of the department 2017 – 2019 was issued when the college was located at Saudi Electric Services Polytechnic (SESP) at Bayesh governorate and under the name of Bayesh Community College (BCC).

However, after the second Strategic Plan of CAIT 2021 – 2025 has been issued according to the new JU Strategic Plan 2020 – 2025, as well as changing the name of the college on 2019 to be the College of Applied Industrial Technology (CAIT) and moving the new location in Alhaqo at Bayesh governorate, it is of essential to update the strategic plan of the department to contend with the new situation.

The Strategic Plan 2021 – 2025 of MET department will build from the position of strength, utilizing the college's values as strong pillars, seeking impetus to address the most pressing issues through *belonging, leadership, excellence, and collaboration*. Moreover the MET - Strategic Plan 2021 – 2025 will rely on the Strategic Directions of Jazan University 2020 – 2025 and the KSA Vision 2030, as well as what were achieved in previous MET/Strategic Plan 2017 – 2019.

Connection among members of MET department is one of our cornerstones which will allow forward movement through the inclusion of the entire student, staff, faculty population, and community in the shared ownership of initiatives and action steps. Reducing unemployment of among graduates of MET programs will heighten our social and economic impact, through the creation of adaptable programs which match with the job-market needs, strengthened links with industry and community outreach. Also integration with industrial partners is beneficial to combine learning with experience when involving those partners not only in internship but also in extracurricular activities that lead to more motivated students. Moreover, MET/CAIT, as one of the assets of JU, is seeking the enhancement of the quality of researches, promote the learning outcomes of the graduates of its programs, and improve the services offered to the community.

College of Applied Industrial Technology (CAIT) acknowledges and respects all contributions propose by students, staff, and faculty which contribute to the decision-making process, foster trust, openness and understanding.

Our strategy will focus: “...*on areas where we can most clearly differentiate ourselves... and produce the most impact...*”.

The department of Mechanical Engineering Technology (MET) embraces the vision, mission, and goals embodied in the current strategy for CAIT 2021 - 2025, which consequently extracted from JU Strategic Plan 2020 - 2025, in order to contribute effectively in JU development. The Vision of MET/CAIT focuses on leadership in the field of technical education, while its mission statement stresses the end product of well qualified mechanical technicians, who have taken advantage of qualified technical programs and industrial partnership, to service the industrial market needs. Accordingly, MET/CAIT is committed to deliver the highest standards of education and ensuring that program educational objectives

and student learning outcomes are not only achieved but also exceed expectations of industrial partners, especially from the perspective of community and industrial development.

Building upon the initial achievements of MET department in CAIT through its first Strategic Plan 2017 – 2019, and having determined organizational readiness for the second Strategic Plan for MET department, the overarching theme of the period 2021 – 2025 is to invest in successful development of the MET programs and reducing unemployment rate among the graduates of the department, through the optimal use of new CAIT campus, and in teaching and learning quality. Finally, these issues are all affected by direct coordination in using the available resources; e.g. funding, facilities, personnel, and time. For these reasons, the MET Strategic Plan 2021 - 2025 is aligned with the CAIT Strategic Plan 2021 - 2025.

The six strategic goals of CAIT have been utilized for MET department, aiming to introduce, where necessary, quality systems that will eventually allow accreditation and drive quality improvement of MET academic programs with appropriate exit points for struggled students. This reflects MET department intention to enhance the quality of the student experience through support student needs in order to produce skilled and motivated graduates with lifelong learning skills. MET department will undertake to comply with CAIT initiatives, when applicable, included in the CAIT Strategic Plan 2021-2025.

## Organizational Structure of MET Department

The organizational structure was developed by Quality Assurance Unit (QAU) of CAIT and ratified by Jazan University in 2019 after revision. The organizational foundations of the CAIT bring clear lines of governance and communication flow, for instance, the structure allows for the future development over the present time scale 2021- 2025 of manpower needs in the administrative areas.

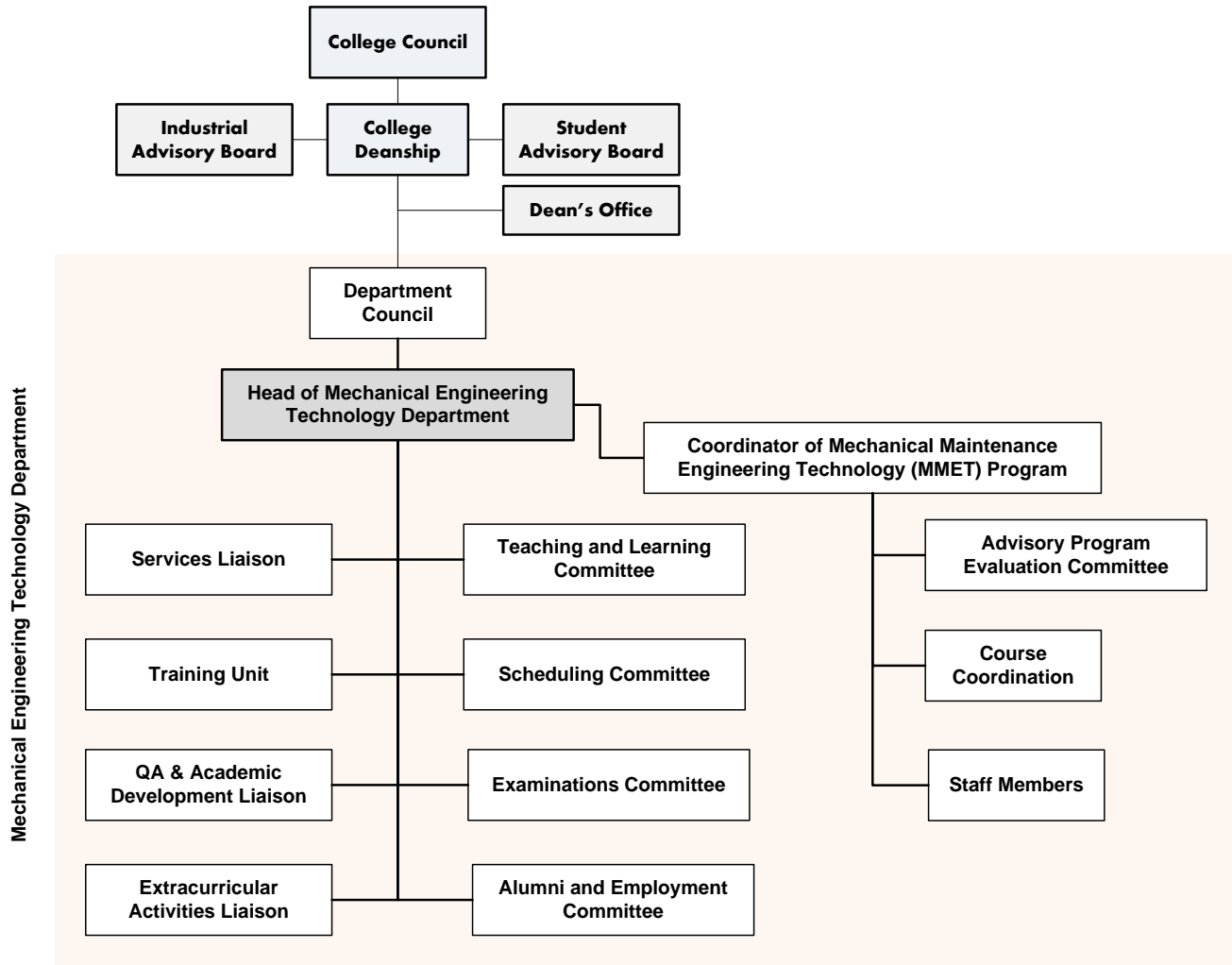


Figure 1 – Organizational Structure Framework of MET Department in CAIT.



## Mechanical Engineering Technology (MET) Department Vision, Mission and Values

### [A] MET Vision

National leadership in the field of technical education in Mechanical Engineering.



Figure 2 –The vision of MET/CAIT

### [B] MET Mission

To service the industrial needs of Jazan and the Kingdom of Saudi Arabia with well-qualified Mechanical Engineering Technology graduates, through the provision of high-quality technical programs and strategic partnerships.

### [C] MET Values

The values of MET Department are the same as the values in CAIT Strategic Plan 2021-25. These values will be put into operation and employed in the context of groups and individuals. They are:

- 1- Belonging
- 2- Leadership
- 3- Excellence
- 4- Collaboration

## **MET Department Strategic Planning 2021-2025**

### **[A] MET Strategic Goals**

The Strategic Goals of MET department will be similar to CAIT Strategic Goals for consistency, they are:

#### **Goal 1: Academic Excellence**

The initiatives are:

1. Keep the ratios for Students and MET Faculty within the optimal rates.
2. Increase the number of accredited Academic Programs in MET Department
3. Enhance the outcomes of the Academic Programs in MET Department
4. Continuous developing of labs/workshops in MET Department to match with the program updates
5. Attracting high quality academic manpower in MET Department to enhance teaching and research

#### **Goal 2: Adaptable Technical Programs**

The initiatives are:

1. Develop adaptable programs in MET Department which have elective courses and exit point to address the needs of employment in the industrial community and help the students to choose among them what suits their capabilities.
2. Creating specialized programs with professional certificates in Mechanical Fields that suit the needs of the region.

#### **Goal 3: Strategic Partnership and Consultancy with Industry**

The initiatives are:

1. Create a Research Unit related to Mechanical areas to support the needs of the industrial field.
2. Establishing educational and training partnerships to promote students by means of workshops and special programs to end up with employment on graduation.

#### **Goal 4: Student-Centered Focus**

The initiatives are:

1. Developing operating procedure of academic advising which acts as a bridge between students and staff in MET Department.
2. Developing facilities for students' extracurricular activities for students in MET Department.

#### **Goal 5: Social Responsibility**

The initiatives are:

1. Providing free short hands-on mechanical engineering training, essential for job-ready manpower, for high school students.
2. Establishing a voluntarily Community Service Unit that provides volunteer works to serve community and spread the volunteer culture within MET department.

**Goal 6: Relational Leadership**

The initiatives are:

1. Developing MET department manpower by providing programs in enhancing their academic, administrative, technical skills and capabilities in their respective fields.
2. Implementing workshops to develop leadership, communication, innovation and entrepreneurship skills among students in MET department.
3. Plan to reduce unemployment for graduates of programs in MET Department.

## [B] ID Cards for the Strategic Goals of MET/CAIT

<b>Strategic Goal ID Card</b>					
<b>MET Strategic Goal number</b>		<b>CAIT01/MET01</b>			
<b>MET Strategic Goal</b>		<b>Academic Excellence</b>			
<b>Initiatives</b>	<b>KPIs<sup>1</sup></b>	<b>Unit</b>	<b>value</b>	<b>Target</b>	<b>Regional Benchmark</b>
Keep the ratios for Students and MET Faculty within the optimal rates	Ratio of student to faculty*	Ratio			
	Dropout rate*	%			
	Percentage of graduation in the specified MMET program time*	%			
	Ratio of faculty holding PhD*	Ratio			
Increase the number of accredited Academic Programs in MET Department	Percentage of academic MET programs accredited by ABET.	%			
	Percentage of academic MET programs accredited by NCAAA.	%			
Enhance the outcomes of the Academic Programs in MET Department	Percentage of achievement in <b>Knowledge</b>	%			
	Percentage of achievement in <b>Skills</b>	%			
	Percentage of achievement in <b>Values</b>	%			
	The ratio of the graduates with honor rank to all graduates	Ratio			
Continuous developing of labs/workshops in MET Department to match with the program updates	The percentage of labs' preparedness	%			
	The percentage of lab occupancy	%			
Attracting high quality academic manpower in MET Department to enhance teaching and research	The average publication for MET faculty member*	Number			
	Rate of citations in peer-reviewed journals for each faculty member*	%			
	The percentage of the budget allocated for scientific research*	%			
	Number of research in ISI journals*	Number			
	Number of research in SCOPUS*	Number			
	The percentage of external funds for scientific research*	%			
	Number of patents and awards*	Number			
	Number of research partnerships with financial income*	Number			

<sup>1</sup> KPIs end with "\*" are required by JU.

Strategic Goal ID Card					
MET Strategic Goal number		CAIT02/MET02			
MET Strategic Goal		Adaptable Technical Programs			
Initiatives	KPIs <sup>2</sup>	Unit	value	Target	Regional Benchmark
Develop adaptable programs in MET Department which have elective courses and exit point to address the needs of employment in the industrial community and help the students to choose among them what suits their capabilities	The ratio of elective courses to core courses offered in MET programs	Ratio			
	The ratio of MET programs that have exit point to all programs	Ratio			
Creating specialized programs with professional certificates in Mechanical Fields that suit the needs of the region.	The number of the students in MET Department who have obtained professional certificates	Number			

<sup>2</sup> KPIs end with “\*” are required by JU.

<b>Strategic Goal ID Card</b>					
<b>MET Strategic Goal number</b>		<b>CAIT03/MET03</b>			
<b>MET Strategic Goal</b>		Strategic Partnership and Consultancy with Industry			
<b>Initiatives</b>	<b>KPIs<sup>3</sup></b>	<b>Unit</b>	<b>value</b>	<b>Target</b>	<b>Regional Benchmark</b>
Create a Research Unit related to Mechanical areas to support the needs of the industrial field.	Number of support request for MET Department from the industrial field.	Number			
	The number of research partnerships in MET Department with the industrial field*	Number			
Establishing educational and training partnerships to promote students by means of workshops and special programs to end up with employment on graduation.	Number of partnership agreement in MET Department	Number			
	Number of students in MET department undertaken workshop which end up with employment on graduation	Number			

<sup>3</sup> KPIs end with “\*” are required by JU.

<b>Strategic Goal ID Card</b>					
<b>MET Strategic Goal number</b>		<b>CAIT04/MET04</b>			
<b>MET Strategic Goal</b>		Student-Cantered Focus			
<b>Initiatives</b>	<b>KPIs<sup>4</sup></b>	<b>Unit</b>	<b>value</b>	<b>Target</b>	<b>Regional Benchmark</b>
Developing operating procedure of academic advising which acts as a bridge between students and staff in MET Department	Students Experience Survey in MET Department	Number 0 to 5			
	Program Evaluation Survey in MET Department	Number 0 to 5			
	Academic Advising Survey in MET Department	Number 0 to 5			
Developing facilities for students' extracurricular activities for students in MET Department.	The number of extracurricular activities in MET Department	Number			
	The number of students in MET Department participating in extracurricular activities	Number			

<sup>4</sup> KPIs end with “\*” are required by JU.

<b>Strategic Goal ID Card</b>					
<b>MET Strategic Goal number</b>		<b>CAIT05/MET05</b>			
<b>MET Strategic Goal</b>		Social Responsibility			
<b>Initiatives</b>	<b>KPIs<sup>5</sup></b>	<b>Unit</b>	<b>value</b>	<b>Target</b>	<b>Regional Benchmark</b>
Providing free short hands-on mechanical engineering training, essential for job-ready manpower, for high school students	The number of participants for the short hands-on mechanical engineering training held	Number			
Establishing a voluntarily Community Service Unit that provides volunteer works to serve community and spread the volunteer culture within MET department	The number of volunteer activities in MET Department that serve the community.	Number			
	Beneficiaries' satisfaction level with community services provided by MET Department	Number 0 to 5			

<sup>5</sup> KPIs end with “\*” are required by JU.



Strategic Goal ID Card					
MET Strategic Goal number		CAIT06/MET06			
MET Strategic Goal		Relational Leadership			
Initiatives	KPIs <sup>6</sup>	Unit	value	Target	Regional Benchmark
Developing MET department manpower by providing programs in enhancing their academic, administrative, technical skills and capabilities in their respective fields	The ratio of participants to faculty in MET Department	Ratio			
	The average number of professional development hours completed by faculty members in MET Department	Number			
	Faculty Satisfaction Survey in MET Department	Number 0 to 5			
Implementing workshops to develop leadership, communication, innovation and entrepreneurship skills among students in MET department	The number of workshops held by MET Department	Number			
	The average number of students who participate in the workshops provided by MET Department	Number			
	Employer Satisfaction Survey for Graduates of MET Department	Number 0 to 5			
Plan to reduce unemployment for graduates of programs in MET Department	The ratio of employed graduates to the total graduates in the last 3 years for MET Department	Ratio			
	Alumni Satisfaction Survey for MET Department	Number 0 to 5			

<sup>6</sup> KPIs end with “\*” are required by JU.