

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

Strategic Plan 2021-2025

**Department of
CHEMICAL ENGINEERING TECHNOLOGY (CHET)**

According to the 2020 – 2025 Strategic Plan of CAIT, the CHET 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**



Table of Contents

Committee of the Strategic Plan for CHET	5
Executive Summary	6
Organizational Structure of CHET Department	8
Chemical Engineering Technology (CHET) Department Vision, Mission and Values	9
[A] CHET Vision	9
[B] CHET Mission	9
[C] CHET Values	9
CHET Department Strategic Planning 2021-2025	10
[A] CHET Strategic Goals	10
[B] ID Cards for the Strategic Goals of CHET/CAIT	12

List of Figures

Figure 1 – Organizational Structure Framework of CHET Department in CAIT. 8

Figure 2 –The vision of CHET/CAIT 9

Committee of the Strategic Plan for CHET

Committee Supervisor

Dr. Essam Shaban Coordinator of Quality Assurance Unit/CAIT

Committee Chairman

Dr. Mohamed Ehtisham Khan Coordinator of CHET Department

Committee Members

Dr. Santhi Raju Pilli Auditor of Quality Assurance Unit/CAIT

Dr. Mohamed Saleh Alomar Academic Advising Coordinator

Dr. Waheed Zahid Ali Faculty Member

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 CHET 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 CHET - 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 CHET/Strategic Plan 2017 – 2019.

Connection among members of CHET 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 CHET 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, CHET/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 Chemical Engineering Technology (CHET) 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 CHET/CAIT focuses on leadership in the field of technical education, while its mission statement stresses the end product of well qualified chemical technicians, who have taken advantage of qualified technical programs and industrial partnership, to service the industrial market needs. Accordingly, CHET/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 CHET department in CAIT through its first Strategic Plan 2017 – 2019, and having determined organizational readiness for the second Strategic Plan for CHET department, the overarching theme of the period 2021 – 2025 is to invest in successful development of the CHET 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 CHET Strategic Plan 2021 - 2025 is aligned with the CAIT Strategic Plan 2021 - 2025.

The six strategic goals of CAIT have been utilized for CHET department, aiming to introduce, where necessary, quality systems that will eventually allow accreditation and drive quality improvement of CHET academic programs with appropriate exit points for struggled students. This reflects CHET 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. CHET department will undertake to comply with CAIT initiatives, when applicable, included in the CAIT Strategic Plan 2021-2025.

Organizational Structure of CHET 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.

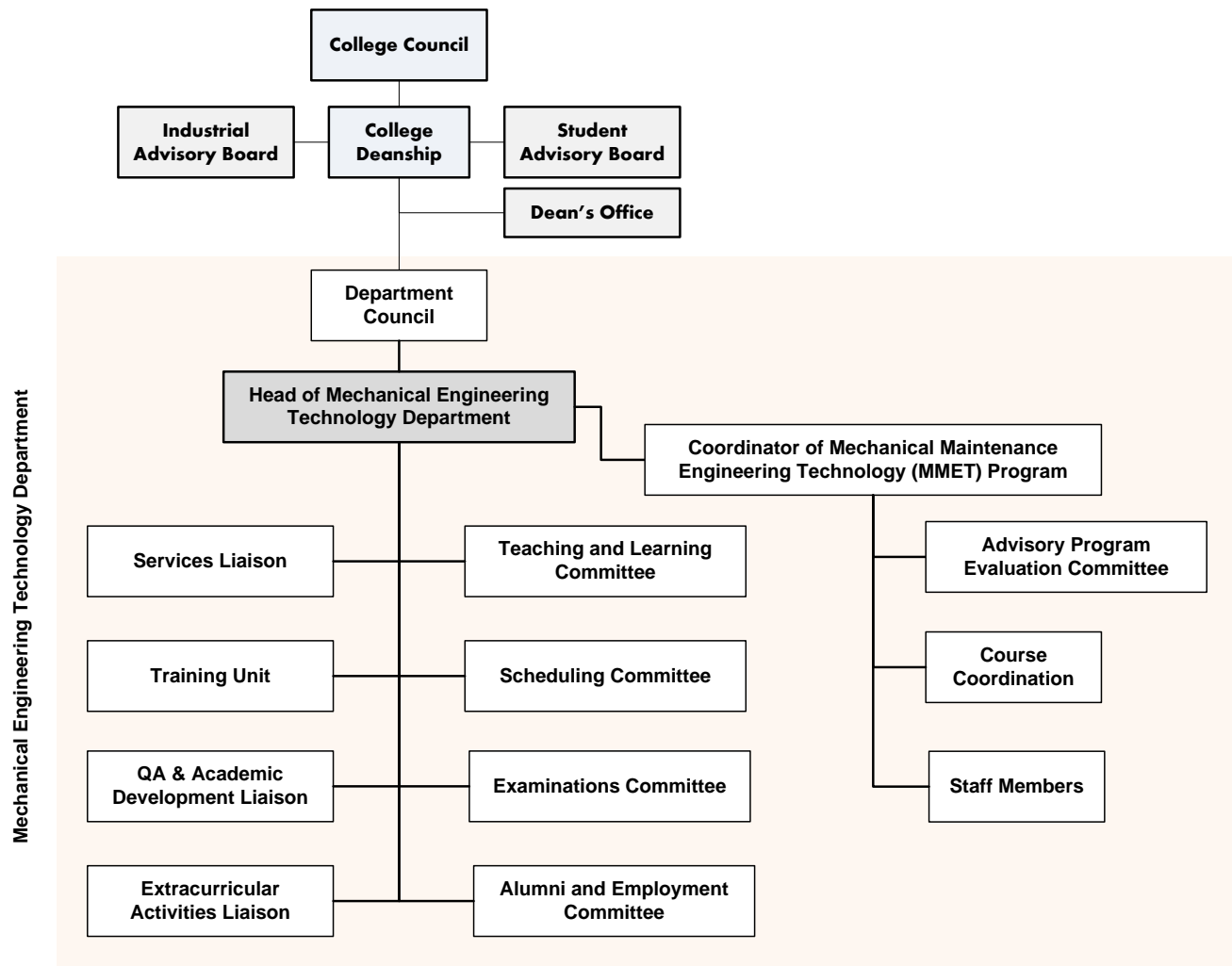


Figure 1 – Organizational Structure Framework of CHET Department in CAIT.

Chemical Engineering Technology (CHET) Department Vision, Mission and Values

[A] CHET Vision

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



Figure 2 –The vision of CHET/CAIT

[B] CHET Mission

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

[C] CHET Values

The values of CHET 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

CHET Department Strategic Planning 2021-2025

[A] CHET Strategic Goals

The Strategic Goals of CHET 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 CHET Faculty within the optimal rates.
2. Increase the number of accredited Academic Programs in CHET Department
3. Enhance the outcomes of the Academic Programs in CHET Department
4. Continuous developing of labs/workshops in CHET Department to match with the program updates
5. Attracting high quality academic manpower in CHET Department to enhance teaching and research

Goal 2: Adaptable Technical Programs

The initiatives are:

1. Develop adaptable programs in CHET 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 Chemical 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 Chemical 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 CHET Department.
2. Developing facilities for students' extracurricular activities for students in CHET Department.

Goal 5: Social Responsibility

The initiatives are:

1. Providing free short hands-on chemical 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 CHET department.

Goal 6: Relational Leadership

The initiatives are:

1. Developing CHET 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 CHET department.
3. Plan to reduce unemployment for graduates of programs in CHET Department.

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

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT01/CHET01			
CHET Strategic Goal		Academic Excellence			
Initiatives	KPIs ¹	Unit	value	Target	Regional Benchmark
Keep the ratios for Students and CHET Faculty within the optimal rates	Ratio of student to faculty*	Ratio			
	Dropout rate*	%			
	Percentage of graduation in the specified CHET program time*	%			
	Ratio of faculty holding PhD*	Ratio			
Increase the number of accredited Academic Programs in CHET Department	Percentage of academic CHET programs accredited by ABET.	%			
	Percentage of academic CHET programs accredited by NCAAA.	%			
Enhance the outcomes of the Academic Programs in CHET Department	Percentage of achievement in Knowledge	%			
	Percentage of achievement in Skills	%			
	Percentage of achievement in Values	%			
	The ratio of the graduates with honor rank to all graduates	Ratio			
Continuous developing of labs/workshops in CHET Department to match with the program updates	The percentage of labs' preparedness	%			
	The percentage of lab occupancy	%			
Attracting high quality academic manpower in CHET Department to enhance teaching and research	The average publication for CHET 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			

¹ KPIs end with “*” are required by JU.

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT02/CHET02			
CHET Strategic Goal		Adaptable Technical Programs			
Initiatives	KPIs ²	Unit	value	Target	Regional Benchmark
Develop adaptable programs in CHET 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 CHET programs	Ratio			
	The ratio of CHET programs that have exit point to all programs	Ratio			
Creating specialized programs with professional certificates in Chemical Fields that suit the needs of the region.	The number of the students in CHET Department who have obtained professional certificates	Number			

² KPIs end with “*” are required by JU.

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT03/CHET03			
CHET Strategic Goal		Strategic Partnership and Consultancy with Industry			
Initiatives	KPIs ³	Unit	value	Target	Regional Benchmark
Create a Research Unit related to Chemical areas to support the needs of the industrial field.	Number of support request for CHET Department from the industrial field.	Number			
	The number of research partnerships in CHET 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 CHET Department	Number			
	Number of students in CHET department undertaken workshop which end up with employment on graduation	Number			

³ KPIs end with “*” are required by JU.

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT04/CHET04			
CHET Strategic Goal		Student-Cantered Focus			
Initiatives	KPIs ⁴	Unit	value	Target	Regional Benchmark
Developing operating procedure of academic advising which acts as a bridge between students and staff in CHET Department	Students Experience Survey in CHET Department	Number 0 to 5			
	Program Evaluation Survey in CHET Department	Number 0 to 5			
	Academic Advising Survey in CHET Department	Number 0 to 5			
Developing facilities for students' extracurricular activities for students in CHET Department.	The number of extracurricular activities in CHET Department	Number			
	The number of students in CHET Department participating in extracurricular activities	Number			

⁴ KPIs end with “*” are required by JU.

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT05/CHET05			
CHET Strategic Goal		Social Responsibility			
Initiatives	KPIs ⁵	Unit	value	Target	Regional Benchmark
Providing free short hands-on chemical engineering training, essential for job-ready manpower, for high school students	The number of participants for the short hands-on chemical engineering training held	Number			
Establishing a voluntarily Community Service Unit that provides volunteer works to serve community and spread the volunteer culture within CHET department	The number of volunteer activities in CHET Department that serve the community.	Number			
	Beneficiaries' satisfaction level with community services provided by CHET Department	Number 0 to 5			

⁵ KPIs end with “*” are required by JU.

Strategic Goal ID Card					
CHET Strategic Goal number		CAIT06/CHET06			
CHET Strategic Goal		Relational Leadership			
Initiatives	KPIs ⁶	Unit	value	Target	Regional Benchmark
Developing CHET 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 CHET Department	Ratio			
	The average number of professional development hours completed by faculty members in CHET Department	Number			
	Faculty Satisfaction Survey in CHET Department	Number 0 to 5			
Implementing workshops to develop leadership, communication, innovation and entrepreneurship skills among students in CHET department	The number of workshops held by CHET Department	Number			
	The average number of students who participate in the workshops provided by CHET Department	Number			
	Employer Satisfaction Survey for Graduates of CHET Department	Number 0 to 5			
Plan to reduce unemployment for graduates of programs in CHET Department	The ratio of employed graduates to the total graduates in the last 3 years for CHET Department	Ratio			
	Alumni Satisfaction Survey for CHET Department	Number 0 to 5			

⁶ KPIs end with “*” are required by JU.