ANNEXURE 1

Sl. No.	Criteria Sub Sections
1	1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program
2	1.5. Establish consistency of PEOs with the Mission of the department

1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program

- **Vision, Mission, and Program Educational Objectives (PEOs) have been formulated and approved based on feedback obtained from stakeholders.**

- **The proof of the process flow of defining Vision, Mission and PEOs is documented:**

1. <u>Process for Formation of Vision and Mission of the Department:</u>

The Department establishes Vision and Mission through a review process involving the stakeholders, like parents, industries, alumni, faculty and students keeping in mind the future scopes of the Department and the societal requirements.

Step 1: Vision and Mission of the institution are taken as the guiding base.

Step 2: Meeting requests were sent to the stakeholders for active participation. Internal and external stakeholders were consulted and based upon the consultation Department vision and mission was developed.

Step 3: Department Advisory Committee reviewed the Department vision and mission, modified it according to the inputs from internal and external stakeholders.

Step 4: After a series of discussions, if Department vision and mission was found to be unsatisfactory, they were again sent to Step 2 for modification.

Based on the mutual consensus from the stakeholders, If the Department vision and mission was found to be satisfactory, and it was published, and process flow chart is depicted in Fig.1.1

Fig.1.1 Process for defining the Vision, Mission of the Department

(a) Draft of Vision and Mission of the Department

Vision Statement of the Department

To be a Centre of Excellence in Mechanical Engineering education and research to confront real world societal problems.

Mission Statements of the Department

M1: To push the frontiers of pedagogy amongst the students and develop new paradigms in search.

M2: To develop products and technologies for the benefit of society in collaboration with industry and commerce.

M3: To mould the young minds and build a comprehensive personality by nurturing strong professionals with human ethics through interaction with faculty and experts from academia / industry.

(b) Feedback from the Stakeholder about the draft Vision and Mission of the department

Feedback on the draft vision was collected from stakeholders, and it summarizes as

ATRIA INSTITUTE OF TECHNOLOGY
Anandnagar, Bengaluru – 560024
Department of Mechanical Engineering

PARENTS FEEDBACK FORM FOR VISION AND MISSION: ME Department

We wish to inform that our department is going in for National Board of Accreditation (NBA) accreditation which is a board of Engineering and Technology, which promotes continual improvement in academic Engineering program.

A crucial step in this procedure is to identify and assess the Vision and Mission defined as the statements which describe the expected accomplishments of department

We need your kind help in assessing this Vision and Mission by filling this survey.

PARENT NAME: Santhosh Kumar A WARD NAME: Puneet Kumar
USN: 1AT16ME028 SEM: 7th

Vision Statement of Department

To be a Centre of Excellence in Mechanical Engineering education and interdisciplinary research to confront real world societal problems **with professional ethics**.

Mission Statements of Department

M1: To push the frontiers of pedagogy amongst the students and develop new paradigms in scratch.

M2: To develop products, processes and technologies for the benefit of society in collaboration with industry and commerce.

M3: To mould the young minds and build a comprehensive personality by nurturing strong professionals with human ethics through interaction with faculty, alumni and experts from academia / industry

(SCALE: 1 = Never / Very Poor, 2 = Rarely / Poor, 3 = Occasionally / Average, 4 = Often / Good, 5 = Completely / Excellent)

		1	2	3	4	5
1.	How well do you think the institution prepares students to meet the challenges and demands of the computing industry?	○	○	○	✓	○
2.	How effectively does the institution encourage research and interdisciplinary learning among students?	○	○	○	✓	○
3.	To what extent does the institution equip students with the necessary skills and knowledge pertaining to industrial needs and their carrier path?	○	○	○	✓	○
4.	How well does the institution foster the overall growth of students, including academic, professional, and personal development?	○	○	○	✓	○
5.	How satisfied are you with the institution's efforts in promoting industry interaction to create awareness of current industrial needs?	○	○	○	✓	○

(Scale: 1 = Never / Very Poor, 2 = Rarely / Poor, 3 = Occasionally / Average, 4 = Often / Good, 5 = Completely / Excellent)

Your Comments:

No Comments

ATRIA INSTITUTE OF TECHNOLOGY
Anandnagar, Bengaluru – 560024
Department of Mechanical Engineering

ALUMNI FEEDBACK FORM FOR VISION AND MISSION: ME Department

We wish to inform that our department is going in for National Board of Accreditation (NBA) accreditation which is a board of Engineering and Technology, which promotes continual improvement in academic Engineering program.

A crucial step in this procedure is to identify and assess the Vision, Mission are defined as the statements which describe the expected accomplishments of department.

We need your kind help in assessing this Vision, Mission by filling this survey.

ALUMNI NAME: Sundal L   YEAR OF PASSING: 2019

ORGANISATION NAME: Auto lig pvt ltd

Vision Statement of the Department

To be a Centre of Excellence in Mechanical Engineering education and research to confront real world societal problems.

Mission Statements of the Department

M1: To push the frontiers of pedagogy amongst the students and develop new paradigms in search.

M2: To develop products and technologies for the benefit of society in collaboration with industry and commerce.

M3: To mould the young minds and build a comprehensive personality by nurturing strong professionals with human ethics through interaction with faculty and experts from academia / industry.

(SCALE: 1 = Never / Very Poor, 2 = Rarely / Poor, 3 = Occasionally / Average, 4 = Often / Good, 5 = Completely / Excellent)

		1	2	3	4	5
1.	How well do you think the department's vision of becoming a "Centre of Excellence" in Mechanical Engineering was reflected in your academic experience?	○	✓	○	○	○
2.	To what extent did the department help shape your personality and professional ethics through mentoring, alumni interaction, or expert sessions?	○	○	✓	○	○
3.	Were you prepared to work professionally in industries of modern technologies?	✓	○	○	✓	○
4.	Do you feel the program prepared you to take on leadership roles in education, entrepreneurship, or administration while upholding strong ethical values?	○	○	○	○	✓
5.	Did your education in the department equip you to solve engineering problems using fundamental science and advanced tools?	○	○	○	✓	○

(Scale: 1 = Never / Very Poor, 2 = Rarely / Poor, 3 = Occasionally / Average, 4 = Often / Good, 5 = Completely / Excellent)

Your Comments:

Interdisciplinary research can be included in vision statement

SIGNATURE: [signature]

(c) Discussion of stakeholder feedback on the draft Vision and Mission of the department in the DAC meeting

The feedback collected from stakeholders was discussed during the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements. The revised versions are presented below, with changes based on stakeholder input highlighted in bold.

Vision Statement of the Department

To be a Centre of Excellence in Mechanical Engineering education and **interdisciplinary** research to confront real world societal problems.

Mission Statements of the Department

M1: To push the frontiers of pedagogy amongst the students and develop new paradigms in search.

M2: To develop products, **processes** and technologies for the benefit of society in collaboration with industry and commerce.

M3: To mould the young minds and build a comprehensive personality by nurturing strong professionals with human ethics through interaction with faculty, alumni and experts from academia / industry

(d) Feedback from the Stakeholder about the first revision of the Vision and Mission of the department.

The feedback collected from stakeholders on Vision and Mission was discussed in the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements.

(e) Discussion of stakeholder feedback on the first revision of Vision and Mission in the DAC meeting

The feedback collected views on revised Vision and Mission from stakeholders was discussed during the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements, as presented below. The changes made based on stakeholder input are highlighted in bold

Vision Statement of Department

To be a Centre of Excellence in Mechanical Engineering education and interdisciplinary research to confront real world societal problems **with professional ethics**.

Mission Statements of Department

M1: To push the frontiers of pedagogy amongst the students and develop new paradigms in search.

M2: To develop products, processes and technologies for the benefit of society in collaboration with industry and commerce.

M3: To mould the young minds and build a comprehensive personality by nurturing strong professionals with human ethics through interaction with faculty, alumni and experts from academia / industry.

(f) Feedback from the Stakeholder about the Second revision of the Vision and Mission of the department.

The feedback collected from stakeholders on Vision and Mission was discussed in the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements. To frame a final Vision and Mission.

2. Process for Formation of Program Educational Objectives (PEOs) of the Department:

The Program Educational Objectives (PEO) was formally established in a process carried out before the launch of the program. PEO's were formulated as a result of a series of meetings, comprising of Faculty, Students, Alumni and industry representatives.

The PEOs are reviewed through the following process steps:

Step 1: Vision and Mission of the Institute and Department are taken as the basic guide for developing program educational objectives

Step 2: Internal and external stakeholders were consulted by Program Assessment Committee and based upon the consultation PEOs were developed.

Step 3: Program Assessment Committee reviewed the PEOs and modified them according to the inputs from internal and external stakeholders.

Step 4: After a series of discussions, if the PEOs were found to be unsatisfactory they were again sent to Step 2 for modification and the process flow chart is depicted in Fig.1.2.

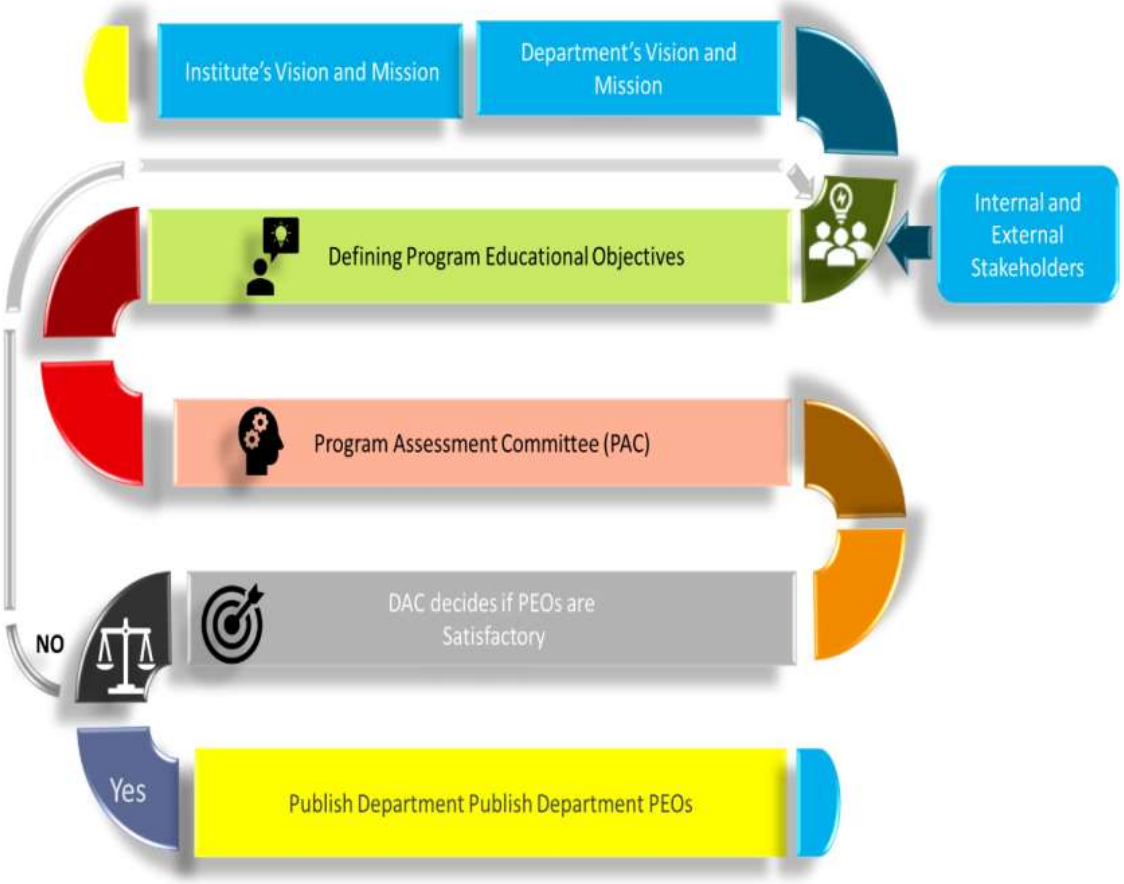

Fig.1.2 Process of defining PEOs

(a) Draft of Program Educational Objectives (PEOs) Department

PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams of Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.

PEO 2: Demonstrate professionalism by applying their technical skills and knowledge: across the spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting global societies.

PEO 3: Work ethically both as an individual and as a team member, eventually becoming leaders in various domains such an entrepreneurship and administration.

(b) Feedback from the Stakeholder about draft PEOs of the department

Feedback from is collected about the PEOs of the department and analyzed further to take corrective action.

ATRIA INSTITUTE OF TECHNOLOGY
Anandnagar, Bengaluru – 560024
Department of Mechanical Engineering

FACULTY FEEDBACK FORM FOR PEOs: Mechanical Department

We wish to inform that our department is going in for National Board of Accreditation (NBA) accreditation which is a board of Engineering and Technology, which promotes continual improvement in academic Engineering program.

A crucial step in this procedure is to identify and assess the Program Educational Objectives (PEO's). PEO's are defined as the statements which describe the expected accomplishments of graduates, three to five years after graduation.

We need your kind help in assessing the PEOs by filling this survey.

NAME: Mr praful DESIGNATION: Assistant professor DoJ: 13/8/16 Date: 18/6/20

Program Educational Objectives (PEO's):

PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams o Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.

PEO 2: Demonstrate professionalism and **accountability** by applying their technical skills and knowledge: across th spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting local and globa societies.

PEO 3: Work ethically both as an individual and as a team member, eventually becoming leaders in various domains sucl an entrepreneurship and administration.

(Scale: 1– very Poor 2– Poor 3– Average 4– Good 5– Excellent, 1–Not at all 2–Slightly 3– Moderately 4– Very 5= completely).

	1	2	3	4	5
1. Are students effectively using computer-aided tools in their academic and project work?				✓	
2. Are there sufficient opportunities provided for students to explore advanced computational tools in classroom and lab settings?		✓			
3. Do students participate actively in co-curricular activities, clubs, or competitions that build leadership skills?				✓	
4. Are students encouraged to participate in internships, industry projects, or technical events to enhance professional skills?					✓
5. Are students given sufficient opportunities to work in teams and contribute effectively as members and leaders?				✓	

Your Comments:

PEO 3. needed to be revised

ATRIA INSTITUTE OF TECHNOLOGY
Anandnagar, Bengaluru – 560024
Department of Mechanical Engineering

STUDENT FEEDBACK FORM FOR PEOs

We wish to inform that our department is going in for National Board of Accreditation (NBA) accreditation which is a board of Engineering and Technology, which promotes continual improvement in academic Engineering program.

A crucial step in this procedure is to identify and assess the Program Educational Objectives (PEO's). PEO's are defined as the statements which describe the expected accomplishments of graduates, three to five years after graduation. We need your kind help in assessing the PEOs by filling in this survey.

NAME: Prajwal. R USN: 1AT16ME065 SEM: 7th

Program Educational Objectives (PEO's).

PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams of Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.

PEO 2: Demonstrate professionalism and accountability by applying their technical skills and knowledge: across the spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting local and global societies.

PEO 3: Work ethically both as an individual and as a team member, eventually becoming leaders in various domains such a entrepreneurship, **education**, and administration

(Scale: 1= very Poor 2= Poor 3= Average 4= Good 5= Excellent, 1=Not at all 2=Slightly 3= Moderately 4= Very 5= completely).

	1	2	3	4	5
1. Do you think the PEOs are aligned with current trends and expectations in Mechanical Engineering?	○	○	○	✓	○
2. Are the PEOs realistic and achievable for graduates within a few years of completing the program?	○	○	○	✓	○
3. Do the PEOs reflect the vision and mission of the department?	○	○	○	✓	○
4. Do you think graduates are well-prepared to apply scientific and computational skills in diverse domains?	○	○	○	✓	○
5. Are students getting enough exposure to interdisciplinary and cutting-edge technologies like Additive Manufacturing and Digital Mechatronics?	○	○	○	○	✓

ANY COMMENTS:

No Comments

(c) Feedback from the Stakeholder about the draft PEOs of the department.

The feedback collected from stakeholders on Vision and Mission was discussed in the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements. The revised versions are presented below, with changes based on stakeholder input highlighted in bold.

The feedback collected from stakeholders on PEOs was discussed in the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements. The revised versions are presented below, with changes based on stakeholder input highlighted in bold

PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams of Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.

PEO 2: Demonstrate professionalism and **accountability** by applying their technical skills and knowledge: across the spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting **local** and global societies.

PEO 3: Work ethically both as an individual and as a team member, eventually becoming leaders in various domains such an entrepreneurship and administration.

(d) Feedback from the Stakeholder about the first revision of PEOs of the department.

The feedback collected from stakeholders on the first revised PEO s of the department.

(e) Discussion of stakeholder feedback on the first revision of PEOs in DAC meeting

The feedback collected views on revised PEOs was discussed during the Department Advisory Committee (DAC) meeting, and their suggestions were incorporated into the Vision and Mission statements, as presented below. The changes made based on stakeholder input are highlighted in bold.

PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams of Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.

PEO 2: Demonstrate professionalism and accountability by applying their technical skills and knowledge: across the spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting local and global societies.

PEO 3: Work ethically both as an individual and as a team member, eventually becoming leaders in various domains such a entrepreneurship, **education**, and administration**.**

(f) Feedback from the Stakeholder about the second revision of PEOs of the department.

The feedback collected from stakeholders on the first revised PEO s of the department

1.5 Establish consistency of PEOs with the Mission of the Department Correlation Improvement

Based on stakeholder feedback, the mapping of PEOs with Mission has been revised:

	M1	M2	M3
PEO1	2	3	1
PEO2	2	2	3
PEO3	1	3	3

Old matrix

Mission key elements / PEO s	M1 Innovative pedagogy	M2/ Product, process, and Technology development	M3/ Professionalism and ethics
PEO 1: Apply fundamental basic science and computer aided technology to solve problems encountered in all streams of Mechanical Engineering and beyond like Robotics, Nanoscience and Computational fluid dynamics.	**3**	**3**	**2**
PEO2/Demonstrate professionalism and accountability by applying their technical skills and knowledge: across the spectrum of scientific disciplines in Additive manufacturing, Digital mechatronics thereby supporting local and global societies.	**2**	**2**	**3**
PEO3/ Work ethically both as an individual and as a team member, eventuality becoming leaders in various domains such a entrepreneurship, education, and administration.	**2**	**2**	**3**

Table 1.1 Revised mission and PEOs matrix.

Justification is provided to validate the mapping between Mission and PEOs:

PEO s	M1	M2	M3
PEO 1	PEO 1 is strongly mapped with M1, as it focuses on advancing pedagogical excellence by empowering students to apply fundamental sciences and computer-aided technologies to solve problems across diverse domains of Mechanical Engineering. To support this, the department has implemented Activity-Based Learning (ABL) and Activity-Based Assessment (ABA), fostering deeper engagement and hands-on understanding of core engineering	PEO 1 is strongly mapped with M2, as it emphasizes fostering professionalism and accountability by equipping students with technical expertise to develop innovative products, processes, and technologies through active collaboration with industry.	PEO 1 is moderately mapped with M3, as it focuses on shaping young minds into well-rounded professionals by equipping them with fundamental scientific knowledge and instilling ethical values through ongoing interaction with faculty, alumni, and industry experts,
PEO 2	PEO 2 is moderately mapped with M1, as it highlights the use of research-oriented pedagogy to foster technical skills and domain-specific knowledge	PEO 2 is moderately mapped with M2, as the development of products and processes in emerging areas such as Additive Manufacturing and Digital Mechatronics is actively supported through innovative teaching methods and industry-relevant training.	PEO 2 is strongly mapped with M3, as the department promotes societal engagement by facilitating structured interactions with alumni and industry experts, thereby enriching students professional and ethical development.

PEO 3	PEO 3 is moderately mapped with M1 as it aims to mould young minds into ethically responsible professionals by fostering teamwork and leadership qualities through active interaction with faculty, alumni, and industry experts.	PEO 3 is moderately mapped with M2, as the department fosters an innovative and entrepreneurial culture by actively engaging students in a variety of technical and non-technical clubs aligned with their interests.	PEO 3 is strongly mapped with M3, as the department emphasizes the development of ethical and professional values in students through sustained interaction with alumni and industry experts.