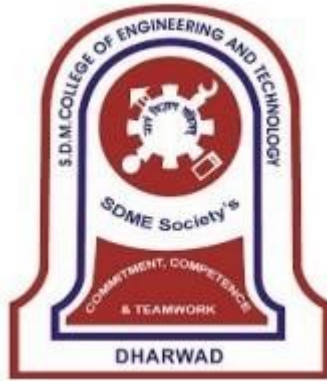# SDM College OF Engineering & Technology

# Dharwad-580002



# Department of Information Science & Engineering

# Stakeholders Feedback Report

Dr. Jagadeesh D. Pujari

HOD, ISE

# INFERENCE AND ACTION PLAN OF ALUMNI SURVEY

| QUESTIONNAIRE | SUMMARY | ACTION PLAN |
|---|---|---|
| Higher Studies Opt | • 12% have gone for higher studies.<br>• Remaining has not opted for higher studies. | • Good Placement at UG Level<br>• Can be Postponed of plans for higher studies |
| Curriculum mapping with higher studies:<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 58% have agreed very relevant.<br>• 33% less relevant.<br>• Remaining 10% Least relevant. | • Motivation for higher studies<br>• Internships in the institution |
| Whether you are into Entrepreneurship? | • 10% agreed.<br>• Remaining % not agreed. | • More courses on Entrepreneurship<br>• Events/activities like HACKATHON<br>• , Business plan, context. |
| JOB profile: | • 58% are programmers in different companies.<br>• 12% testing.<br>• 3% teaching.<br>• 3% linux admin.<br>• 3% musician.<br>• 3% full stack developer. | • Courses to orient students towards higher level jobs like developer, designer etc. |
| Salary Package: | • 49% 2-5 lakhs.<br>• 42% 5-10 lakhs.<br>• 6.1% greater than 10 lakhs. | • Salary Packages to be enhanced by encouraging students to go for better campus |
| Relevance of curriculum with respect to your current job: | • 64 % relevant.<br>• 21 % poorly relevant.<br>• 15 % excellent. | • Syllabus modification to include relevant subjects |
| Satisfaction of the job; | • 94% satisfied.<br>• Remaining % not satisfied. | • High level of satisfaction is achieved<br>• Aspiration must be increased through placement. |
| To meet the current job requirements tools used which you have not learnt in degree: | • AWS_Unix, Node IS, Flutter, Putty, Node IS express. XML. API. | • Some of the tools to be taught using value added program. |
| Any other suggestions<br>Suggestion: | • Internship must be added in the curriculum.<br>• Industrial training.<br>• More labs rather than theoretical subjects.<br>• Introducing new language like java script , mean stack, full stack.<br>• Computer vision , AI , Data analytics .<br>• Network programming to be introduced<br>• Need more hands-on industrial training | • Artificial Intelligence, Data analytics is introduced in the curriculum.<br>• Internship, Industrial training is carried out<br>• Java Lab,ADA Lab, File structures Lab is introduced in the curriculum<br>• Network programming in Computer networks lab is introduced<br>• More number hands-on industrial |

| | | training is conducted Under C-III |
|---|---|---|
| How well do you think UG programme at SDMCET prepared you to develop career or work related knowledge & skills.<br>• Excellent<br>• Very Good<br>• Good<br>• Poor | • 51.5% Good<br>• 27.3% Very good.<br>• 15.2% Excellent.<br>• 6.1% poor | • Contemporary curriculum to be maintained through constant revision of courses. |
| How well do you think undergraduate programme at SDMCET prepared you to Think analytically and logically | • 48.4% Good<br>• 27.3% very good.<br>• 15.2% Excellent<br>• 9.1% Poor | • Thinking and creative abilities to be enhanced through activity base learning |
| How well do you think undergraduate programme at SDMCET prepared you to Communicate well: written and oral | • 42.4% Good<br>• 33.3% Very good.<br>• 15.2% Excellent.<br>• 9.1% Poor. | • Communication skills to be include through add-on courses. |
| How well do you think undergraduate programme at SDMCET prepared you to Acquire new skills and knowledge on your own | • 36.4% Good<br>• 39.4% Very good.<br>• 18.2% Excellent.<br>• 6.1% Poor. | • New skills through self study, internship etc to be encouraged. |
| How well do you think UG programme at SDMCET prepared you to work effectively as a team member? | • 30.3% Good.<br>• 42,4% Very good.<br>• 21.2% excellent.<br>• 6.1% Poor. | • Team based activities like projects to be increased in number and extracurricular activities. |
| How well do you think undergraduate programme at SDMCET prepared you to be an effective leader? | • 45.5% Very good<br>• 24.2% Good<br>• 24.2% excellent<br>• 6.1% Poor | • Leadership skills developed through team activity to be enhanced. |
| Vision of the department:<br>To equip students with latest skills in the field of Information Technology (I.T) and the proper professional and ethical values supplemented with practical orientation to face challenges of modern computing industry.<br>Indicate how well do you agree with Vision of the department<br>• Strongly agree<br>• Agree<br>• Disagree | • 62% of the Alumni strongly agreed with the present vision.<br>• Remaining % of the Alumni agreed with the present vision. | • Practical skills like interaction techniques, ethics, values etc through add-on courses.<br><br>• Whether 'latest skills 'could be substituted by competent is to be discussed and change to be made. |
| Do you suggest any changes in the vision? (Specify) | | • |
| Indicate how well do you agree with vision of the department<br>• Strongly agree<br>• Agree | • 62% have agreed vision statement is very relevant to ISE course. | • Substituting practical orientation in the statement with contemporary IT Knowledge.<br>• To be changed in BOS and AC |

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| • Disagree | | |
| Whether VISION STATEMENT is Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • 85% agreed vision statement is mapped to ISE course. | • As vision is mapped almost completely with minor points to be revised as stated above. |
| Mission of the department-<br>Indicate how well do you agree with Mission of the department<br>M1- To make the students technically superior and ethically strong who in turn shall advance the quality of life.<br>• Strongly agree<br>• Agree<br>• Disagree<br>M2- To promote research and development in the frontier areas of Information technology.<br>• Strongly agree<br>• Agree<br>• Disagree<br>M3- To generate competent professional to become part of the industry and research organization at the national levels.<br>• Strongly agree<br>• Agree<br>• Disagree | • **M1.** 54% strongly agreed the present M1 Remaining portion have only agreed the M1 Statement..<br><br>• **M2.** 62% strongly agreed with the present M2, 31% agreed & remaining portion cant say.<br><br>• **M3.** 62% strongly agreed with the present M3. Remaining % just agreed. | • Mission statements are meant for implementing vision therefore the following changes may be thought of from the survey<br>• Technical superiority is to be implemented through contemporary curriculum and use of modern ICT tools. Therefore they are included as mission point<br>• Facilities to be provided for exposure to best IT Practices is another mission point<br>• 'Ethical and moral values' are retained separate mission point. |
| Whether all MISSION STATEMENTS are relevant to the Information Science and Engineering Course<br>• Very relevant<br>• Less Relevant<br>• Not relevant | • 70% are agreed with present mission statements which are relevant to ISE course. | • Relevance is to be increased with appropriate change in focus as suggested above. |
| Whether all MISSION STATMENTs are Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • 93% academicians agreed with completely mapped with ISE course | • A mission statements changes are also to be completely mapped to VISION of ISE Course |
| Do you suggest any changes in the Mission? (Specify) | **Changes as above** | • Changes carried out as mentioned |
| Program Educational Objectives (PEOs)<br><br>Indicate how well do you agree with each Program Educational Objectives (PEOs)<br>PEO-1<br>Excel as Information Technology Professional with proficiency in designing solutions to Information Engineering problems. | • 62% have agreed all PEOs are very relevant to mission of the dept. | • It was felt that 'excel' for all would be unrealistic therefore 'develop into' was suggested in PEO-1<br>• In PEO-2,was left untouched since a section of graduates always will have inclination of higher studies<br>• In PEO-3,the concepts of team working and collaborating for best |

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| •     Very relevant<br>•     Less Relevant<br>•     Not relevant<br>PEO-2<br>Pursue higher studies with the sound knowledge of basic concepts and skills in science and Information Technology disciplines<br>•     Very relevant<br>•     Less Relevant<br>•     Not relevant<br>PEO-3<br>Exhibit professionalism, team work and exposure to current trends towards continuous learning<br>•     Very relevant<br>•     Less Relevant<br>•     Not  relevant | | output was suggested. |
| Whether all PEO STATEMENTs are relevant to the Information Science and Engineering Course<br>•     Very relevant<br>•     Less Relevant<br>•     Not relevant | •     85% are agreed PEO's are very relevant to ISE course. | • As the feedback received agree with statements of PEOs essence is left is as it is and only specific words are changed |
| Whether all PEO STATEMENTs are Mapped to the Information Science and Engineering Course<br>•     Completely Mapped<br>•     Partially Mapped<br>•     Not Mapped | •     100% agreed PEO's stmt's are mapped to ISE course. | • As the feedback received agree with statements of PEOs essence is left is as it is and only specific words are changed |
| PO1 : Engineering knowledge<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>•     Very relevant<br>•     Relevant<br>•     Cant say<br>•     Less relevant<br>•     Least relevant | •     62% are very relevant to ISE course. | • ISE is taught to be applied to be applied science, hence more applicants like AI,ML and IOT etc are brought into syllabus |
| PO2 : Prob Analysis<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>•     Very relevant<br>•     Relevant<br>•     Cant say<br>•     Less relevant<br>•     Least relevant | •     69% are very relevant to ISE course. | • Current courses provide enough Problem Solving opportunities as seen by near 90% relevance. |
| PO 3:Design & development of solution<br>[Indicate Whether PO  STATEMENT is relevant to the | •     69% are very relevant to ISE course. | • Current courses provide enough |

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| Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | | 'design and development opportunities as seen by near 90% relevance. |
| PO 4:Conduct investigation of complex problem<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% have agreed very relevant. | • Several Opportunities are provided in current curriculum for attaining this PO |
| PO 5:Modern tool usage<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69% have agreed very relevant. | • Modern ICT Tools are to be introduced to students.<br>• This is being continuously done in Microcontroller, DBMS, IoT, BDA, CN etc. courses. |
| PO 6: Engineering & Society<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 46% have agreed very relevant | • Mini project and Major project are significant contributors to societal addressing by engineering students and they will be more people friendly. |
| PO 7:Environmental & system relative<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 38.5% have agreed very relevant. | • Concern about Environment and its preservation are also mainly addressed through socially relevant projects. |
| PO 8: Ethics<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant | • 62% are very relevant. | • This PO is having scope of address only in humanities component of syllabus and through certain assignments etc. in some courses. |

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| • Cant say<br>• Less relevant<br>• Least relevant | | |
| PO 9: Individual & term work<br>[Indicate Whether POSTATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69.2% are very relevant. | • Team work to be strengthened by giving more group assignments and class activities etc. |
| PO 10: Communication<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% are very relevant. | • Communication is addressed in first year courses. Also some training programs are conducted for soft skills |
| PO 11:Project Management & finance<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% are very relevant. | • It needs to be augmented with project execution also an open elective is to be made available for project management. |
| PO 12 : Lifelong learning.<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 46.2% are very relevant.<br>• 46% are irrelevant. | • Most fundamental subjects need to be reinforced through brush up and crash courses in final year to attain life long learning and helps in placements. |
| PSO 1: An ability to develop logical reasoning, coding skills, analysis and mathematical modeling.<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant | • 69.2% are very relevant. | • Current courses provide enough coding skills but higher level of coding is to be introduced. |

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| • Least relevant | | |
| PSO 2: Ability to modify, debug, test and adapt software modules for varied applications. [Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% are very relevant. | • Professional skills are acquired through real life activities ,conference, workshops, Presentation etc. |

# INFERENCE AND ACTION PLAN OF ACADEMIC SURVEY

| QUESTIONNAIRE | SUMMARY | ACTION PLAN |
|---|---|---|
| **Vision of the department:**<br>To equip students with latest skills in the field of Information Technology (I.T) and the proper professional and ethical values supplemented with practical orientation to face challenges of modern computing industry.<br>Indicate how well do you agree with Vision of the department<br>• Strongly agree<br>• Agree<br>• Disagree | • 62% of the academicians strongly with the present vision, mission, remaining % of the academicians to modify the vision. | Whether 'latest skills 'could be substituted by competent is to be discussed and change to be made. |
| Do you suggest any changes in the vision? (Specify) | • To equip the students with the latest skills in the field of Information Technology (I.T) as the competent professional and ethical values supplemented with a practical orientation to face challenges of the modern computing industry. | To develop competent Information Technology Engineers having complete Knowledge and skills in contemporary Information Technology practices. |
| Indicate how well do you agree with vision of the department<br>• Strongly agree<br>• Agree<br>• Disagree | • 62% have agreed vision stmt very relevant to ISE course. | Substituting practical orientation in the statement with contemporary IT Knowledge.<br>To be changed in BOS and AC |
| Whether VISION STATEMENT is Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • 85% agreed vision stmt is mapped to ISE course. | As vision is mapped almost completely with minor points to be revised as stated above. |
| **Mission of the department-**<br>Indicate how well do you agree with Mission of the department<br>　**M1**- To make the students technically superior and ethically strong who in turn shall advance the quality of life.<br>　　o Strongly agree<br>　　o Agree<br>　　o Disagree<br>　**M2**- To promote research and development in the frontier areas of Information technology.<br>　　o Strongly agree<br>　　o Agree<br>　　o Disagree<br>　**M3**- To generate competent professional to | • **M1.** 54% strongly agreed the present M1. Remaining portion have only agreed the M1 Statement.<br>• **M2**. 62% strongly agreed with the present M2 31% agreed & remaining portion cant say.<br>• **M3.** 62% strongly agreed with the present M3. Remaining % just agreed. | **Mission statements are meant for implementing vision therefore the following changes may be thought of from the survey**<br>• Technical superiority is to be implemented through contemporary curriculum and use of modern ICT tools. Therefore they are included as mission point<br>• Facilities to be provided for exposure to best IT Practices is another mission point<br>• 'Ethical and moral values' are retained separate mission point. |

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| become part of the industry and research organization at the national levels.<br><br>        o   Strongly agree<br>        o   Agree<br>        o   Disagree | | |
| Whether all MISSION STATEMENTS are relevant to the Information Science and Engineering Course<br>•    Very relevant<br>•    Less Relevant<br>•    Not relevant | • 70% are agreed with present mission stmts which are relevant to ISE course. | Relevance is to be increased with appropriate change in focus as suggested above. |
| Whether all MISSION STATMENTs are Mapped to the Information Science and Engineering Course<br>•    Completely Mapped<br>•    Partially Mapped<br>•    Not Mapped | • 93% academicians agreed with completely mapped with ISE course | A mission statements changes are also to be completely mapped to VISION of ISE Course |
| Do you suggest any changes in the Mission? (Specify) | • A small thought, in M3, do we need to specify "National Levels"? Can it be generalized?<br>• In place of superior competent would be better word in M1<br>• To make students industrially competent is probably needed | **M1.** To develop contemporary curriculum in information technology delivered using Innovative teaching learning practices and ICT tools.<br>**M2.** To provide facilities for relevant research and expose students to the best industry Practices in Information Technology.<br>**M3.** To inculcate the best moral values and professional ethics in students. |
| **Program Educational Objectives (PEOs)**<br><br>    Indicate how well do you agree with each Program Educational Objectives (PEOs)<br>**PEO-1**<br>Excel as Information Technology Professional with proficiency in designing solutions to Information Engineering problems.<br>•    Very relevant<br>•    Less Relevant<br>•    Not relevant<br>**PEO-2**<br>Pursue higher studies with the sound knowledge of basic concepts and skills in science and Information Technology disciplines<br>•    Very relevant<br>•    Less Relevant<br>•    Not relevant<br>**PEO-3** | • 62% have agreed all PEOs are very relevant to mission of the dept. | • It was felt that 'excel' for all would be unrealistic therefore 'develop into' was suggested in PEO-1<br>• In PEO-2,was left untouched since a section of graduates always will have inclination of higher studies<br>• In PEO-3, the concepts of team working and collaborating for best output was suggested. |

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| Exhibit professionalism, team work and exposure to current trends towards continuous learning<br>• Very relevant<br>• Less Relevant<br>• Not relevant | | |
| Whether all PEO STATEMENTs are relevant to the Information Science and Engineering Course<br>• Very relevant<br>• Less Relevant<br>• Not relevant | • 85% are agreed PEO's are very relevant to ISE course. | As the feedback received agree with statements of PEOs essence is left is as it is and only specific words are changed |
| Do you suggest any changes in the PEOs ? (Specify) | --- | |
| Whether all PEO STATEMENTs are Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • 100% agreed PEO's stmt's are mapped to ISE course. | As the feedback received agree with statements of PEOs essence is left is as it is and only specific words are changed |
| PO1 : Engineering knowledge<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 62% are very relevant to ISE course. | ISE is taught to be applied to be applied science, hence more applicants like AI,ML and IOT etc are brought into syllabus |
| PO2 : Problem Analysis<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69% are very relevant to ISE course. | Current courses provide enough Problem Solving opportunities as seen by near 90% relevance. |
| PO 3:Design & development of solution<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69% are very relevant to ISE course. | Current courses provide enough 'design and development opportunities as seen by near 90% relevance. |
| PO 4:Conduct investigation of complex problem<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ] | • 54% have agreed very relevant. | Several Opportunities are provided in current curriculum for attaining this PO |

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| • Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | | |
| **PO 5**:Modern tool usage<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69% have agreed very relevant. | • Modern ICT Tools are to be introduced to students.<br>• This is being continuously done in Microcontroller, DBMS, IoT, BDA, CN etc. courses. |
| **PO 6**: Engineering & Society<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 46% have agreed very relevant | Mini project and Major project are significant contributors to societal addressing by engineering students and they will be more people friendly. |
| **PO 7**:Environmental & system relative<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 38.5% have agreed very relevant. | Concern about Environment and its preservation are also mainly addressed through socially relevant projects. |
| **PO 8**: Ethics<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 62% are very relevant. | This PO is having scope of address only in humanities component of syllabus and through certain assignments etc. in some courses. |
| **PO 9**: Individual & term work<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say | • 69.2% are very relevant. | Team work to be strengthened by giving more group assignments and class activities etc. |

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| • Less relevant<br>• Least relevant | | |
| **PO 10**: Communication<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% are very relevant. | Communication is addressed in first year courses. Also some training programs are conducted for soft skills |
| **PO 11**:Project Management & finance<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 54% are very relevant. | It needs to be augmented with project execution also an open elective is to be made available for project management. |
| **PO 12** : Lifelong learning.<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 46.2% are very relevant.<br>• 46% are irrelevant. | Most fundamental subjects need to be reinforced through brush up and crash courses in final year to attain life long learning and helps in placements. |
| **PSO 1**: An ability to develop logical reasoning, coding skills, analysis and mathematical modeling<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 69.2% are very relevant. | Current courses provide enough coding skills but higher level of coding is to be introduced. |
| **PSO 2:** Ability to modify, debug, test and adapt software modules for varied applications [Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant | • 54% are very relevant. | Professional skills are acquired through real life activities ,conference, workshops, Presentation etc. |

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| • Least relevant | | |
| Most of the academician suggested following subject to be introduced in the curriculum.<br>• Machine learning<br>• Artificial Intelligence<br>• Block chain technology<br>• Natural language processing<br>• Python<br>• Network security lab<br>• Embedded systems & IOT. | -- | The following subjects are introduced in the curriculum<br><br>See table below |

The following subjects are introduced in the curriculum

| Subject | Year | Sem | Lab/Theory/Elective |
|---|---|---|---|
| Data Mining and Machine Learning Tools Lab | 2017-18 | 7th | Lab |
| Machine Learning | 2018-19 | 8th | Theory |
| Machine Learning Lab | | | Lab |
| Artificial Intelligence | | | Elective |
| Python (Data Mining and Machine Learning Tools Lab) | 2017-18 | 7th | Lab |
| Embedded systems & IOT | | 8th | Elective |

# INFERENCE AND ACTION PLAN OF EMPLOYER SURVEY

| QUESTIONNAIRE | SUMMARY | ACTION PLAN |
|---|---|---|
| **Vision of the department:**<br>To equip students with latest skills in the field of Information Technology (I.T) and the proper professional and ethical values supplemented with practical orientation to face challenges of modern computing industry.<br>Indicate how well do you agree with Vision of the department<br>• Strongly agree<br>• Agree<br>• Disagree | • **62% have agreed vision of the dept.**<br>• **38% have strongly agreed vision of the dept.** | Whether 'latest skills 'could be substituted by competent is to be discussed and change to be made. |
| Do you suggest any changes in the vision? (Specify) | **--** | |
| Indicate how well do you agree with vision of the department<br>• Strongly agree<br>• Agree<br>• Disagree | • **62% have agreed vision stmt very relevant to ISE** | Substituting practical orientation in the statement with contemporary IT Knowledge. To be changed in BOS and AC |
| Whether VISION STATEMENT is Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • **85% agreed vision stmt is mapped to ISE course.** | As vision is mapped almost completely with minor points to be revised as stated above. |
| **Mission of the department-**<br>Indicate how well do you agree with Mission of the department<br>**M1**- To make the students technically superior and ethically strong who in turn shall advance the quality of life.<br>• Strongly agree<br>• Agree<br>• Disagree<br>**M2**- To promote research and development in the frontier areas of Information technology.<br>• Strongly agree<br>• Agree<br>• Disagree<br>**M3**- To generate competent professional to become part of the industry and research organization at the national levels.<br>• Strongly agree<br>• Agree<br>• Disagree | • **57% have only just agreed.**<br>• **Remaining strongly agreed.** | **Mission statements are meant for implementing vision therefore the following changes may be thought of from the survey**<br>• Technical superiority is to be implemented through contemporary curriculum and use of modern ICT tools. Therefore they are included as mission point<br>• Facilities to be provided for exposure to best IT Practices is another mission point<br>• 'Ethical and moral values' are retained separate mission point. |

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| Whether all MISSION STATEMENTS are relevant to the Information Science and Engineering Course<br>• Very relevant<br>• Less Relevant<br>• Not relevant | • **70% are agreed with present mission stmts which are relevant to ISE** | Relevance is to be increased with appropriate change in focus as suggested above. |
| Whether all MISSION STATMENTs are Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped<br>• Not Mapped | • **93% academicians agreed with completely mapped with ISE** | A mission statements changes are also to be completely mapped to VISION of ISE Course |
| Do you suggest any changes in the Mission ? (Specify) | **Changes as above** | Changes carried out as mentioned |
| **Program Educational Objectives (PEOs)**<br><br>    Indicate how well do you agree with each Program Educational Objectives (PEOs)<br>**PEO-1**<br>Excel as Information Technology Professional with proficiency in designing solutions to Information Engineering problems.<br>• Very relevant<br>• Less Relevant<br>• Not relevant<br>**PEO-2**<br>Pursue higher studies with the sound knowledge of basic concepts and skills in science and Information Technology disciplines<br>• Very relevant<br>• Less Relevant<br>• Not relevant<br>**PEO-3**<br>Exhibit professionalism, team work and exposure to current trends towards continuous learning<br>• Very relevant<br>• Less Relevant<br>• Not relevant | • **PEO 1: 71% have said very relevant to ISE course.**<br><br>• **PEO 2: 76% have said very only just relevant to ISE**<br><br>• **PEO 3: 62% have just said relevant to ISE course.** | • It was felt that 'excel' for all would be unrealistic therefore 'develop into' was suggested in PEO-1<br>• In PEO-2,was left untouched since a section of graduates always will have inclination of higher studies<br>• In PEO-3, the concepts of team working and collaborating for best output was suggested. |
| Whether all PEO  STATEMENTs are relevant to the Information Science and Engineering Course<br>• Very relevant<br>• Less Relevant<br>• Not relevant | • **85% are agreed PEO's are very relevant to ISE** | As the feedback received agree with statements of PEOs essence is left is as it is and only specific words are changed |
| Whether all PEO  STATEMENTs are Mapped to the Information Science and Engineering Course<br>• Completely Mapped<br>• Partially Mapped | • **100% agreed PEO's stmt's are mapped to ISE** | |

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|---|---|---|
| •     Not Mapped | | |
| Do you suggest any changes in the PEOs? (Specify) | •   **67% -NO** | |

| Most of the Employers suggested following subject to be introduced in the curriculum.<br>•     Machine learning<br>•     Artificial Intelligence<br>•     Python<br>•     Embedded systems & IOT. | --- | The following subjects are introduced in the curriculum- |

The following subjects are introduced in the curriculum-

| Sub | Year | Sem | Lab/Theory |
|---|---|---|---|
| Data Mining and Machine Learning Tools Lab | 2017-18 | 7th | Lab |
| Machine Learning | 2018-19 | 8th | Theory |
| Machine Learning Lab | | | Lab |
| Artificial Intelligence | | | Elective |
| Python (Data Mining and Machine Learning Tools Lab) | 2017-18 | 7th | Lab |
| Embedded systems & IOT | | 8th | Elective |

| PO1 : Engineering knowledge<br>[Indicate Whether PO   STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>•   Very relevant<br>•   Relevant<br>•   Cant say<br>•   Less relevant<br>•   Least relevant | •   38% agreed very relevant to ISE course. | ISE is taught to be applied to be applied science, hence more applicants like AI,ML and IOT etc are brought into syllabus |
| PO2 : Probem Analysis<br>[Indicate Whether PO   STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>•   Very relevant<br>•   Relevant | •   48% agreed very relevant to ISE course.<br>•   43% agreed just relevant to ISE course. | Current courses provide enough Problem Solving opportunities as seen by near 90% relevance. |

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| • Cant say<br>• Less relevant<br>• Least relevant | | |
| **PO 3**:Design & development of solution<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 48% agreed very relevant to ISE course.<br>• Remaining % are relevant. | Current courses provide enough 'design and development opportunities as seen by near 90% relevance. |
| **PO 4**:Conduct investigation of complex problem<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 57% agreed just relevant.<br>• 43% are very relevant | Several Opportunities are provided in current curriculum for attaining this PO |
| **PO 5**:Modern tool usage<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 43% agreed very relevant to ISE course.<br>• 43% agreed relevant to ISE course.<br>• 10% agreed least relevant to ISE course. | • Modern ICT Tools are to be introduced to students.<br>• This is being continuously done in Microcontroller, DBMS, IoT, BDA, CN etc. courses. |
| **PO 6**: Engineering & Society<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 67% relevant.<br>• 19% very relevant.<br>• 9.5% least relevant. | Mini project and Major project are significant contributors to societal addressing by engineering students and they will be more people friendly. |
| **PO 7**:Environmental & system relative<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant | • 57% relevant<br>• 33% very relevant.<br>• 4.8% least relevant. | Concern about Environment and its preservation are also mainly addressed through socially relevant projects. |

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| • Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | | |
| **PO 8**: Ethics<br>[Indicate Whether PO  STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 48% very relevant.<br>• 48% relevant.<br>• Remaining % less relevant. | This PO is having scope of address only in humanities component of syllabus and through certain assignments etc. in some courses. |
| **PO 9**: Individual & term work<br>[Indicate Whether PO  STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 52% relevant.<br>• Remaining % very relevant. | Team work to be strengthened by giving more group assignments and class activities etc. |
| **PO 10**: Communication<br>[Indicate Whether PO  STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 57% relevant<br>• Remaining % are relevant. | Communication is addressed in first year courses. Also some training programs are conducted for soft skills |
| **PO 11**:Project Management & finance<br>[Indicate Whether PO  STATEMENT is relevant to the Information Science and Engineering Course ]<br><br>• Very relevant<br>• Relevant<br>• Cant say<br>• Less relevant<br>• Least relevant | • 86% relevant<br>• Remaining % very relevant. | It needs to be augmented with project execution also an open elective is to be made available for project management. |
| **PO 12** : Lifelong learning.<br>[Indicate Whether PO STATEMENT is relevant to the Information Science and Engineering Course ] | • 43% relevant.<br>• 43% very relevant.<br>• Remaining % cant say. | Most fundamental subjects need to be reinforced through brush up and crash courses in final year to attain life long learning and helps in placements. |

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|---|---|---|
| <ul><li>Very relevant</li><li>Relevant</li><li>Cant say</li><li>Less relevant</li><li>Least relevant</li></ul> | | |
| **PSO 1**: An ability to develop logical reasoning, coding skills, analysis and mathematical modeling.<br>[Indicate Whether PSO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br><ul><li>Very relevant</li><li>Relevant</li><li>Cant say</li><li>Less relevant</li><li>Least relevant</li></ul> | <ul><li>62% relevant.</li><li>Remaining % very relevant.</li></ul> | Current courses provide enough coding skills but higher level of coding is to be introduced. |
| **PSO 2:** Ability to modify, debug, test and adapt software modules for varied applications.<br>[Indicate Whether PSO STATEMENT is relevant to the Information Science and Engineering Course ]<br><br><ul><li>Very relevant</li><li>Relevant</li><li>Cant say</li><li>Less relevant</li><li>Least relevant</li></ul> | <ul><li>62% relevant</li><li>Remaining % very relevant.</li></ul> | Professional skills are acquired through real life activities ,conference, workshops, Presentation etc. |