**SO1. An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science, and mathematics.**

**Passing criterion >= 70%**

PI 1-1 Identify and formulate engineering problems

PI 1-2 Solve problems by applying mathematics and engineering knowledge

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PI 1-1 Identify and formulate engineering problems

**EGCO112 Programming Techniques**

**Q.1.1 Final Exam**

**A screenshot of a social media post

Description automatically generated**

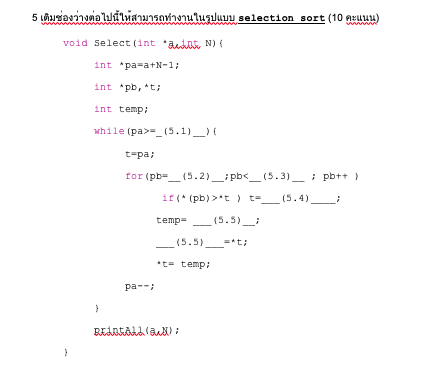
| **Student No.** | **PI 1-1 (Marks)** | **Pass(>=2.8)** |
| --- | --- | --- |
| 1 | 3 | ✓ |
| 2 | 3.5 | ✓ |
| 3 | 3 | ✓ |
| 4 | 3 | ✓ |
| 5 | 3.5 | ✓ |
| 6 | 2 | 🗶 |
| 7 | 3.5 | ✓ |
| 8 | 3.5 | ✓ |
| 9 | 3.5 | ✓ |
| 10 | 3.5 | ✓ |
| 11 | 3 | ✓ |
| 12 | 3.5 | ✓ |
| 13 | 3.5 | ✓ |
| 14 | 3 | ✓ |
| 15 | 3.5 | ✓ |
| 16 | 3 | ✓ |
| 17 | 3 | ✓ |
| 18 | 4 | ✓ |
| 19 | 4 | ✓ |
| 20 | 2 | 🗶 |
| 21 | 3 | ✓ |
| 22 | 3.5 | ✓ |
| 23 | 3.5 | ✓ |
| 24 | 4 | ✓ |
| 25 | Absence | - |
| 26 | 3.5 | ✓ |
| 27 | Absence | - |
| 28 | 2.5 | ✓ |
| 29 | 4 | ✓ |
| 30 | 3 | ✓ |
| 31 | 3.5 | ✓ |
| 32 | 2 | 🗶 |
| 33 | Absence | - |
| 34 | 4 | ✓ |
| 35 | 2.5 | 🗶 |
| 36 | 3.5 | ✓ |
| Number of Pass |  | 29 |

PI 1-1 Attainability = 29/33 = 87.88% **Attainable**

PI 1-2 Solve problems by applying mathematics and engineering knowledge

**EGCO112 Programming Techniques**

**Q.4 Midterm Exam**



| **Student No.** | **PI 1-2 (Marks)** | **Pass(>=7)** |
| --- | --- | --- |
| 1 | 2 | 🗶 |
| 2 | 6 | 🗶 |
| 3 | 10 | ✓ |
| 4 | 10 | ✓ |
| 5 | 9 | ✓ |
| 6 | 7 | ✓ |
| 7 | 10 | ✓ |
| 8 | 9 | ✓ |
| 9 | 6 | 🗶 |
| 10 | 10 | ✓ |
| 11 | 6 | 🗶 |
| 12 | 6 | 🗶 |
| 13 | 10 | ✓ |
| 14 | 3 | 🗶 |
| 15 | 8.5 | ✓ |
| 16 | 6 | 🗶 |
| 17 | 2 | 🗶 |
| 18 | 7 | ✓ |
| 19 | 9 | ✓ |
| 20 | 1 | 🗶 |
| 21 | 1 | 🗶 |
| 22 | 3 | 🗶 |
| 23 | 5 | 🗶 |
| 24 | 3 | 🗶 |
| 25 | 10 | ✓ |
| 26 | 10 | ✓ |
| 27 | 8 | ✓ |
| 28 | 6 | 🗶 |
| 29 | 10 | ✓ |
| 30 | 4 | 🗶 |
| 31 | 3 | 🗶 |
| 32 | 2 | 🗶 |
| 33 | Absence | - |
| 34 | 4 | 🗶 |
| 35 | 2 | 🗶 |
| 36 | 7 | ✓ |
| Number of Pass |  | 16 |

PI 1-2 Attainability = 16/35 = 45.71 % **Not Attainable**

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**SO1 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 1-1 | ✓ |  |  |  |  |
| 1-2 | 🗶 | Lack of critical thinking skills | Add more critical thinking skills in the new curriculum | Next curriculum revision (2 years) | 4 years |

**SO5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objective.**

**Passing criterion >= 70%**

PI 5-1 Assign the appropriate tasks and establish plans to finish work and meet goals on time (report)

PI 5-2 Create fair collaboration (Teamwork)

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**Project score**

| **Student No.** | **PI 5-1** | **PI 5-2** |
| --- | --- | --- |
| 1 | ✓ | ✓ |
| 2 | ✓ | ✓ |
| 3 | ✓ | ✓ |
| 4 | ✓ | ✓ |
| 5 | ✓ | ✓ |
| 6 | ✓ | ✓ |
| 7 | ✓ | ✓ |
| 8 | 🗶 | ✓ |
| 9 | ✓ | ✓ |
| 10 | ✓ | ✓ |
| 11 | ✓ | ✓ |
| 12 | ✓ | ✓ |
| 13 | ✓ | ✓ |
| 14 | ✓ | ✓ |
| 15 | ✓ | ✓ |
| 16 | ✓ | ✓ |
| 17 | ✓ | ✓ |
| 18 | ✓ | ✓ |
| 19 | ✓ | ✓ |
| 20 | ✓ | ✓ |
| 21 | ✓ | ✓ |
| 22 | ✓ | ✓ |
| 23 | 🗶 | ✓ |
| 24 | ✓ | ✓ |
| 25 | ✓ | 🗶 |
| 26 | ✓ | ✓ |
| 27 | ✓ | ✓ |
| 28 | ✓ | ✓ |
| 29 | ✓ | ✓ |
| 30 | ✓ | ✓ |
| 31 | ✓ | ✓ |
| 32 | ✓ | ✓ |
| 33 | Absence | Absence |
| 34 | ✓ | 🗶 |
| 35 | ✓ | ✓ |
| 36 | ✓ | ✓ |
| Number of Pass | 33 | 33 |

PI 5-1: Attainability = 33/35 = 94.28% **Attainable**

PI 5-2: Attainability = 33/35 = 94.28% **Attainable**

**SO5 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 5-1 | ✓ |  |  |  |  |
| 5-2 | ✓ |  |  |  |  |