**SO 1 an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (a, e)**

**Passing criterion >= 70%**

PI 1-1 identify and formulate engineering problems

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show the systematic planning and show problem solving skill.

| **Student No.** | **PI 1-1  Pass at 1.5 points** |
| --- | --- |
| 5913197 | 1.7 (✓) |
| 5913198 | 2.0 (✓) |
| 5913200 | 2.0 (✓) |
| 5913201 | 2.0 (✓) |
| 5913203 | 1.7 (✓) |
| 5913204 | 2.0 (✓) |
| 5913205 | 2.0 (✓) |
| 5913207 | 2.0 (✓) |
| 5913208 | 1.3 (🗶) |
| 5913210 | 2.0 (✓) |
| 5913211 | 2.0 (✓) |
| 5913212 | 2.0 (✓) |
| 5913213 | 1.7 (✓) |
| 5913214 | 2.0 (✓) |
| 5913215 | 2.0 (✓) |
| 5913216 | 2.0 (✓) |
| 5913217 | 1.7 (✓) |
| 5913218 | 2.0 (✓) |
| 5913219 | 1.7 (✓) |
| 5913220 | 2.0 (✓) |
| 5913221 | 2.0 (✓) |
| 5913375 | 2.0 (✓) |
| 5913376 | 2.0 (✓) |
| 5913377 | 2.0 (✓) |
| 5913378 | 1.7 (✓) |
| 5913380 | 1.7 (✓) |
| 5913382 | 1.3 (🗶) |
| 5913383 | 2.0 (✓) |
| 5913384 | 1.3 (🗶) |
| 5913385 | 1.3 (🗶) |
| 5913386 | 2.0 (✓) |
| Number of Pass | 27 |

PI 1-1: Attainability = 27/31 = 87 % **Attainable**

**SO1 Conclusion**

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

**SO 2 An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors (c, h)**

**Passing criterion >= 70%**

PI 2-1 produce a design that meet a set of requirements, needs, and constraints

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show the task according to set objective .

| **Student No.** | **PI 2-1  Pass at 2 points** |
| --- | --- |
| 5913197 | 2.67 (✓) |
| 5913198 | 2.00 (✓) |
| 5913200 | 3.00 (✓) |
| 5913201 | 2.67 (✓) |
| 5913203 | 2.67 (✓) |
| 5913204 | 2.33 (✓) |
| 5913205 | 2.00 (✓) |
| 5913207 | 2.67 (✓) |
| 5913208 | 2.00 (✓) |
| 5913210 | 3.00 (✓) |
| 5913211 | 3.00 (✓) |
| 5913212 | 2.67 (✓) |
| 5913213 | 1.67 (🗶) |
| 5913214 | 2.33 (✓) |
| 5913215 | 2.00 (✓) |
| 5913216 | 2.67 (✓) |
| 5913217 | 2.67 (✓) |
| 5913218 | 3.00 (✓) |
| 5913219 | 2.67 (✓) |
| 5913220 | 3.00 (✓) |
| 5913221 | 3.00 (✓) |
| 5913375 | 2.67 (✓) |
| 5913376 | 3.00 (✓) |
| 5913377 | 2.67 (✓) |
| 5913378 | 2.67 (✓) |
| 5913380 | 1.67 (🗶) |
| 5913382 | 2.67 (✓) |
| 5913383 | 2.67 (✓) |
| 5913384 | 2.67 (✓) |
| 5913385 | 2.00 (✓) |
| 5913386 | 3.00 (✓) |
| Number of Pass | 29 |

PI 2-1: Attainability = 29/31 = 93.54 % **Attainable**

**SO2 Conclusion**

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

**SO 3 An ability to communicate effectively with a range of audiences (g)**

**Passing criterion >= 70%**

PI 3-1 demonstrate clearly, precise, and concise presentation using appropriate terminology

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show the good presentation skill and explain the topic clearly

| **Student No.** | **PI 3-1  Pass at 2 points** |
| --- | --- |
| 5913197 | 2.7 (✓) |
| 5913198 | 2.7 (✓) |
| 5913200 | 2.7 (✓) |
| 5913201 | 3.0 (✓) |
| 5913203 | 2.7 (✓) |
| 5913204 | 3.0 (✓) |
| 5913205 | 2.7 (✓) |
| 5913207 | 2.7 (✓) |
| 5913208 | 2.3 (✓) |
| 5913210 | 2.0 (✓) |
| 5913211 | 2.7 (✓) |
| 5913212 | 2.7 (✓) |
| 5913213 | 1.7 (🗶) |
| 5913214 | 3.0 (✓) |
| 5913215 | 2.7 (✓) |
| 5913216 | 2.7 (✓) |
| 5913217 | 2.7 (✓) |
| 5913218 | 3.0 (✓) |
| 5913219 | 2.7 (✓) |
| 5913220 | 3.0 (✓) |
| 5913221 | 3.0 (✓) |
| 5913375 | 2.7 (✓) |
| 5913376 | 2.3 (✓) |
| 5913377 | 3.0 (✓) |
| 5913378 | 2.7 (✓) |
| 5913380 | 1.7 (🗶) |
| 5913382 | 3.0 (✓) |
| 5913383 | 2.7 (✓) |
| 5913384 | 3.0 (✓) |
| 5913385 | 2.3 (✓) |
| 5913386 | 2.3 (✓) |
| Number of Pass | 29 |

PI 3-1: Attainability = 29/31 = 93.54 % **Attainable**

**SO3 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 3-1 | ✓ |  |  |  |  |

**SO 4 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts (f, h)**

**Passing criterion >= 70%**

PI 4-2 follow class agreements, laws, and regulations

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show punctuality

| **Student No.** | **PI 4-2 Pass at 2 points** |
| --- | --- |
| 5913197 | 2.0 (✓) |
| 5913198 | 2.0 (✓) |
| 5913200 | 2.0 (✓) |
| 5913201 | 2.0 (✓) |
| 5913203 | 2.0 (✓) |
| 5913204 | 2.0 (✓) |
| 5913205 | 2.0 (✓) |
| 5913207 | 2.0 (✓) |
| 5913208 | 1.7 (🗶) |
| 5913210 | 2.0 (✓) |
| 5913211 | 2.0 (✓) |
| 5913212 | 2.0 (✓) |
| 5913213 | 2.0 (✓) |
| 5913214 | 2.0 (✓) |
| 5913215 | 2.0 (✓) |
| 5913216 | 2.0 (✓) |
| 5913217 | 2.0 (✓) |
| 5913218 | 1.7 (🗶) |
| 5913219 | 2.0 (✓) |
| 5913220 | 1.7 (🗶) |
| 5913221 | 1.7 (🗶) |
| 5913375 | 2.0 (✓) |
| 5913376 | 2.0 (✓) |
| 5913377 | 2.0 (✓) |
| 5913378 | 2.0 (✓) |
| 5913380 | 2.0 (✓) |
| 5913382 | 2.0 (✓) |
| 5913383 | 2.0 (✓) |
| 5913384 | 2.0 (✓) |
| 5913385 | 1.7 (🗶) |
| 5913386 | 2.0 (✓) |
| Number of Pass | 26 |

PI 4-2: Attainability = 26/31 = 83.87 % **Attainable**

**SO3 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 4-2 | ✓ |  |  |  |  |

**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

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show the good team-working skill

| **Student No.** | **PI 5-1  Pass at 2 points** |
| --- | --- |
| 5913197 | 2.0 (✓) |
| 5913198 | 2.0 (✓) |
| 5913200 | 2.0 (✓) |
| 5913201 | 2.0 (✓) |
| 5913203 | 2.0 (✓) |
| 5913204 | 2.0 (✓) |
| 5913205 | 2.0 (✓) |
| 5913207 | 2.0 (✓) |
| 5913208 | 2.0 (✓) |
| 5913210 | 1.0 (🗶) |
| 5913211 | 2.0 (✓) |
| 5913212 | 2.0 (✓) |
| 5913213 | 2.0 (✓) |
| 5913214 | 2.0 (✓) |
| 5913215 | 2.0 (✓) |
| 5913216 | 2.0 (✓) |
| 5913217 | 2.0 (✓) |
| 5913218 | 2.0 (✓) |
| 5913219 | 2.0 (✓) |
| 5913220 | 2.0 (✓) |
| 5913221 | 2.0 (✓) |
| 5913375 | 2.0 (✓) |
| 5913376 | 2.0 (✓) |
| 5913377 | 2.0 (✓) |
| 5913378 | 2.0 (✓) |
| 5913380 | 2.0 (✓) |
| 5913382 | 2.0 (✓) |
| 5913383 | 2.0 (✓) |
| 5913384 | 2.0 (✓) |
| 5913385 | 2.0 (✓) |
| 5913386 | 2.0 (✓) |
| Number of Pass | 30 |

PI 5-1: Attainability = 30/31 = 96.77 % **Attainable**

**SO5 Conclusion**

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

**SO6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions (b)**

**Passing criterion >= 70%**

PI 6-1 develop and conduct appropriate experimentation

PI 6-2 analyze and interpret data, and use engineering judgment to draw conclusions

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

| **Student No.** | **PI 6-1 Pass at 3 points** | **PI 6-2 Pass at 3 points** |
| --- | --- | --- |
| 5913197 | 3.0 (✓) | 3.0 (✓) |
| 5913198 | 3.0 (✓) | 3.0 (✓) |
| 5913200 | 3.3 (✓) | 3.3 (✓) |
| 5913201 | 3.7 (✓) | 3.7 (✓) |
| 5913203 | 3.0 (✓) | 3.0 (✓) |
| 5913204 | 3.7 (✓) | 3.7 (✓) |
| 5913205 | 3.0 (✓) | 3.0 (✓) |
| 5913207 | 3.0 (✓) | 3.0 (✓) |
| 5913208 | 2.3 (🗶) | 2.3 (🗶) |
| 5913210 | 4.0 (✓) | 4.0 (✓) |
| 5913211 | 3.3 (✓) | 3.3 (✓) |
| 5913212 | 3.0 (✓) | 3.0 (✓) |
| 5913213 | 2.7 (🗶) | 2.7 (🗶) |
| 5913214 | 3.7 (✓) | 3.7 (✓) |
| 5913215 | 3.0 (✓) | 3.0 (✓) |
| 5913216 | 3.0 (✓) | 3.0 (✓) |
| 5913217 | 3.0 (✓) | 3.0 (✓) |
| 5913218 | 3.7 (✓) | 3.7 (✓) |
| 5913219 | 3.0 (✓) | 3.0 (✓) |
| 5913220 | 3.7 (✓) | 3.7 (✓) |
| 5913221 | 3.7 (✓) | 3.7 (✓) |
| 5913375 | 3.0 (✓) | 3.0 (✓) |
| 5913376 | 3.7 (✓) | 3.7 (✓) |
| 5913377 | 3.7 (✓) | 3.7 (✓) |
| 5913378 | 3.0 (✓) | 3.0 (✓) |
| 5913380 | 2.7 (🗶) | 2.7 (🗶) |
| 5913382 | 3.0 (✓) | 3.0 (✓) |
| 5913383 | 3.0 (✓) | 3.0 (✓) |
| 5913384 | 3.0 (✓) | 3.0 (✓) |
| 5913385 | 2.3 (🗶) | 2.3 (🗶) |
| 5913386 | 3.7 (✓) | 3.7 (✓) |
| Number of Pass | 27 | 27 |

PI 6-1: Attainability = 27/31 = 87.09 % **Attainable**

PI 6-2: Attainability = 27/31 = 87.09 % **Attainable**

**SO6 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 6-1 | ✓ |  |  |  |  |
| 6-2 | ✓ |  |  |  |  |

**SO7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies**

**Passing criterion >= 70%**

PI 7-1 acquire and apply new knowledge

**EGCO495 Capstone Computer Engineering Project**

**Project**

1. Present the senior project to show an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

| **Student No.** | **PI 7-1 Pass at 3 points** |
| --- | --- |
| 5913197 | 3.7 (✓) |
| 5913198 | 3.0 (✓) |
| 5913200 | 3.7 (✓) |
| 5913201 | 3.7 (✓) |
| 5913203 | 3.7 (✓) |
| 5913204 | 3.3 (✓) |
| 5913205 | 3.0 (✓) |
| 5913207 | 3.7 (✓) |
| 5913208 | 2.3 (🗶) |
| 5913210 | 4.0 (✓) |
| 5913211 | 3.7 (✓) |
| 5913212 | 3.7 (✓) |
| 5913213 | 2.7 (🗶) |
| 5913214 | 3.3 (✓) |
| 5913215 | 3.0 (✓) |
| 5913216 | 4.0 (✓) |
| 5913217 | 3.7 (✓) |
| 5913218 | 3.7 (✓) |
| 5913219 | 3.7 (✓) |
| 5913220 | 3.7 (✓) |
| 5913221 | 3.7 (✓) |
| 5913375 | 4.0 (✓) |
| 5913376 | 3.3 (✓) |
| 5913377 | 3.7 (✓) |
| 5913378 | 3.7 (✓) |
| 5913380 | 2.7 (🗶) |
| 5913382 | 3.7 (✓) |
| 5913383 | 3.7 (✓) |
| 5913384 | 3.7 (✓) |
| 5913385 | 2.3 (🗶) |
| 5913386 | 3.3 (✓) |
| Number of Pass | 27 |

PI 7-1: Attainability = 27/31 = 87.09 % **Attainable**

**SO6 Conclusion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PI** | **Attainability** | **Reason** | **Remedial Action** | **Action plan** | **Measurements** |
| 7-1 | ✓ |  |  |  |  |