Student Name

School / Training Facility

**ARTICULATION COMPETENCY RECORD**

**Baker College**

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| Please check below each skill the student has mastered with a minimum of 80 percent accuracy. |

**EGR 105: Introduction to Engineering and Design**

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| **Task** | | **Satisfactory** | **Unsatisfactory** |
| 1. | Show an understanding of professionalism and engineering as a profession, including professional societies, their focus and functions. |  |  |
| 2. | Identify the steps in the Engineering Design Process. |  |  |
| 3. | Show the ability to distinguish between the four categories in the technological team. |  |  |
| 4. | Understand the principle of concurrent engineering and the importance of teamwork in design and development. |  |  |
| 5. | Demonstrate teamwork skills while working on a group design project. |  |  |
| 6. | Show an understanding of problem-solving techniques and solve problems using the Engineering Design Process. |  |  |
| 7. | Demonstrate an understanding of the different areas of engineering as well as different engineering disciplines. |  |  |
| 8. | Demonstrate knowledge of engineering communication media by a class presentation of a report or design project analysis and associated supporting documents. |  |  |
| 9. | Demonstrate an understanding of engineering communication, specifically drawings and other forms of pictorial engineering information. |  |  |
| 10. | Demonstrate an understanding of the basics of engineering calculation and computation such as approximation, accuracy and precision. |  |  |
| 11. | Demonstrate the ability to sketch, graph and present engineering information in an understandable manner. |  |  |
| 12. | Demonstrate the ability to use and understand the U.S. Customary and Engineering System and the SI (International) Engineering System including its basic units and dimensions. |  |  |
| 13. | Demonstrate an understanding of engineering problems and methods of solutions. |  |  |
| 14. | Demonstrate an understanding of safety, reliability, quality and functionality in relation to engineering and design. |  |  |
| 15. | Assess the impact of design changes at different stages of the project life cycle. |  |  |
| 16. | Develop critical thinking skills in relation to engineering problem solving and design. |  |  |
| 17. | Complete a term research paper, utilizing the Internet, library and other available resources, on an engineering design topic. |  | ☐ |

Teacher signature Date