

**MECE 499**  
**SUMMER PRACTICE GUIDE II FOR SENIOR (4<sup>th</sup> YEAR) STUDENTS OF**  
**MECHATRONICS ENGINEERING DEPARTMENT**

**INFORMATION**

The objective of MECE499 summer practice is to give senior mechatronics engineering students the opportunity to improve and expand their theoretical and applied knowledge gained through their first three years of coursework in the curriculum. These opportunities include learning and investigating advanced engineering applications, and getting involved in design, research and development, production and process development activities. Students are expected to study and document the following:

1. Company information; *Company history, organizational structure, field of work, qualifications and number of employees, examples of mechatronics engineering related company products and future plans of the company.*
2. Mechatronics engineering related design, research and development, production and process development studies in the company; *Investigation and detailed description of at least two mechatronics engineering related design, research and development, production and process development studies of the company. Contribution of the intern to at least one relevant study withheld during the summer practice must be explained in detail including technical calculations and illustrations.* For each study the following must be documented in detail:
  - a. objective and description,
  - b. qualification and number of directly involved employees,
  - c. utilized sources of information,
  - d. timeline and stages,
  - e. used methods and approaches (analytical, numerical, experimental, computer aided design and/or simulation, etc.),
  - f. utilized laboratory, production and/or test units, technical devices and equipments, computer hardware and software systems, sensors, actuators, controller sub-systems and their descriptions,
  - g. technical calculations and engineering drawings

**FORMAT OF THE SUMMER PRACTICE REPORT**

1. The report should be written in accordance with the summer practice principles and program.
2. The report must be written in English and typed on a computer.
3. Number all the pages. Place the page numbers at the bottom of the page.
4. Number all the figures and tables in the text. Use figure and table captions whenever necessary.
5. Number and place engineering drawings and other illustrations (charts, diagrams etc.) in the “Appendix”

6. Each chapter should start on a new page. The titles and subtitles should be clearly differentiated.
7. Provide a nomenclature at the beginning of the report, giving detailed definitions of technical terms/abbreviations used
8. A professional-looking engineering report format must be used. In engineering drawings, engineering standards must be followed.
9. Each report must include the following sections:
  - a. Cover page (a sample cover page is given at the end of this Guide),
  - b. Abstract: 200-words summarizing objective, contents, results and conclusions,
  - c. Table of Contents: Sections and associated page numbers,
  - d. Nomenclature: If there are design calculations and/or abbreviations used in the report, nomenclature should be used
  - e. Company information: Name, location and organization chart of the company, number of engineers and their duties, main field of business for the company, relation of the company with mechatronics engineering, brief history of the company.
  - f. Introduction: In this section the scope and objective of the summer practice must be given.
  - g. Main body of the report: In this section, observations and work done in accordance with summer practice program must be given in detail. Related data, tables and engineering drawings must be numbered, explained and given in Appendix.
  - h. Discussion and Conclusion: In this section, knowledge and skills gained during the summer practice must be evaluated; technical assessment of the company and proper suggestions should be given.
  - i. Appendices: All data, tables, and illustrations must be given in this section.
  - j. Evaluation form filled by the student indicating chapter number by each criteria.

## **FAIL CONDITIONS**

Non submission of written or e-copy report  
Report not submitted at requested date  
Report not accepted by the evaluator  
Company performance report not received  
Company performance report has a Grade “D”, not stamped/signed  
Any similarity to previous/new reports

## **DURATION OF SUMMER PRACTICE AND INSPECTION**

Duration of summer practice shall be at least 4 weeks (20 workdays). If the firm works on Saturdays and Sundays it must be indicated on the acceptance form (This is also necessary for insurance of the students).

During the summer practice period, Mechatronics Engineering Department instructors and assistants may visit/call the company. If the student is absent without reasonable excuse during these visits, the summer practice of that student will not be accepted.

Enclosure: Sample cover page for reports



**ATILIM  
UNIVERSITY**

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*ATILIM UNIVERSITY*

*DEPARTMENT OF MECHATRONICS*

*ENGINEERING*

*MECE 499*

**SUMMER PRACTICE REPORT**

Summer practice period:

Name of the Company worked:

Report date:

**Name :**

**Surname :**

**Student ID :**