

I. Course Overview:

Upon successful completion of this course, the students should be able to understand the organizational structures of different construction companies and how the companies function.

II. Units:

Unit 1. 1. Introduction to Construction Company Organizational Structures

General Outcome:

1.0 The students should be able to understand and identify the organizational structure of different construction companies.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Recognize different forms of structure.
- 1.2 Understand organizational charts.
- 1.3 Understand roles of people on charts.

Unit 2. 2. Software Programs used in Construction

General Outcome:

2.0 The students should be able to recognize and understand software programs used in the construction industry [Primivera, Timberline, etc.].

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

2.1 Recognize software programs used in the Construction Industry.

2.2 Know where to go to find programs, manuals, tutorials.

2.3 Understand how to road job costs: profitability.

2.4 Understand accounting, payables, receivables, billing.

2.5 Understand labor units.

2.6 Project job costs.

Unit 3. 3. Introduction to Estimating

General Outcome:

3.0 The students should be able to understand what an estimating department does.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

3.1 Describe the staffing in the estimating department.

3.2 Understand the roles of the estimating personnel.

3.3 Read an estimate.

3.4 Use digitizers and software programs.

Unit 4. 4. Introduction to Project Management

General Outcome:

4.0 The students should be able to understand the role of the project manager in the construction industry.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Understand the job responsibilities of project managers.
- 4.2 Understand the software used by project managers.
- 4.3 Understand how project managers schedule.
- 4.4 Understand how project managers budget.
- 4.5 Understand the process involved in billing and collections.
- 4.6 Describe a G-703 form and understand its use.

Unit 5. 5. Introduction to Financial Management in Construction Industry

General Outcome:

5.0 The students should be able to understand the role of financial personnel in the construction industry.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 5.1 Understand the budget process.
- 5.2 Understand the need for bids and the bidding process.
- 5.3 Understand the need for insurance and workmen's compensation.
- 5.4 Understand the tax saver programs.
- 5.5 Understand the profit and loss statement.

Unit 6. 6. Introduction to Marketing in Construction Industry

General Outcome:

6.0 The students should be able to understand the need for marketing in the construction industry.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

6.1 Develop a sample presentation for a job.

6.2 Use Microsoft PowerPoint.

6.3 Understand the importance of and process of networking as a marketing tool.

Unit 7. 7 Shadowing of Management Personnel

General Outcome:

7.0 The students should be able to understand the roles of different employees.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

7.1 Know the personnel, their roles and relationship within the organization of the company shadowed.

7.2 Describe how a company operates.

Unit 8. 8. Job Site Visits

General Outcome:

8.0 The students should be able to understand from site visits the process of constructing a building.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 8.1 Get excited about the industry.
- 8.2 Describe the roles and responsibilities of the staff within a company that is visited.
- 8.3 Understand job site safety.
- 8.4 Understand the material deliveries and procurement process.
- 8.5 Describe the clean-up processes.
- 8.6 Understand the relationship with sub-contractors and understand their role within a project.
- 8.7 Understand the steps in scheduling progress of a job.
- 8.8 Report to classmates what they learned from company visits.