

CMI COURSE CURRICULUM COURSE ACTION

Course Title: Footing & Foundation **Alpha Number:** VCARP 104 **CIP No.** 46.0000

Type of Action:

☐ New Course (attach narrative justification for course creation)

☒ Substantive Revision (attach narrative justification for changes, including assessment and/or achievement data and feedback from the advisory committee if relevant)

Select all that apply:

- ☒ Change in number of credit hours
☐ Change in prerequisite
☒ Substantive change in course content
☒ Change to SLOs
☐ Other:

☐ Non-substantive Revision

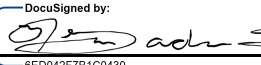
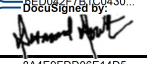
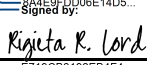
Select all that apply:

- ☐ Change in Alpha Number or Title (unless letter abbreviation has not previously been used)
☐ Edit to course description that does not alter the substance of the course
☐ Change to recommended texts
☐ Other

☐ Reinstitution of Archived Course (attach narrative justification for reinstitution, including evidence of demand, evidence of capacity, feedback from the advisory committee if relevant, and Commentary that speaks directly to the reasons the course was initially archived)

☐ Reaffirmation of Course (only allowable if course completion rate exceeds ISS, the benchmark has been met for the majority of SLO assessments, and there is no evidence of inequitable levels of achievement across subpopulations; attach evidence)

Approvals:

	Name	Signature	Date
Department Chair	Waisake Savu	 DocuSigned by: 6ED042F7B1C0430...	4/21/2025
Curriculum Committee Chair	Desmond Doulatram	 DocuSigned by: 8A4E9FDD06E14D5...	5/4/2025
Dean	Rigjeta Lord	 Signed by: E719CB3192EB4F4...	5/4/2025
VPASA	Dr. Elizabeth Switaj	 DocuSigned by: 89BEB3BDDC23455...	5/5/2025

CMi COURSE OUTLINE**CIP No.** 46.0201**Version No.** 004VCARP 104Footing and Foundation**Alpha Number****Course Title****Previous Alpha Number:****Course Description:**

Introduces students to the knowledge and skills to construct safe, durable, and code-compliant footings and foundations, focusing on soil types, site preparation, materials, construction techniques, and troubleshooting. Emphasis is placed on understanding building codes, interpreting construction drawings, and ensuring structural integrity to prepare students for residential and commercial projects.

Course originally prepared by: Diane Myzoe- Debrum

July 2010

Most recent revision by:Rigietta LordWAVESApril/2025**Course mode(s):** x Face to Face (including Zoom) Hybrid Distance Education**Credits calculated by:** Credit Hour X Clock Hour**Contact Hours:** 105

Type	No. of Hours	No. of Credits	Maximum No. of Hours Online
Lecture/Seminar/Workshop	15	1	
Clinical			
Practicum			
Lab	90	2	
Fieldwork			
Studio Time			
Total	105	3	

Purpose(s) of Course: Degree Requirement _____
Degree Elective _____
General Education _____

Credit Certification X (Certificate of Completion in Carpentry)

Developmental _____
CTE/TVET x
ABE/Adult HS _____

Distribution Area: Humanities _____
Social Sciences _____
Mathematics (Credit) _____
Science _____

Prerequisite: VCARP 101 and VCARP 106

Student Learning Outcomes: Upon completion of this course, students will be able to:

1. Understand soil conditions to determine appropriate foundation requirements.
2. Recall construction drawings and blueprints for footing and foundation projects.
3. Identify site preparation, including leveling, grading, and layout, for foundation construction.
4. List various types of footings and foundations, adhering to building codes and best practices.
5. Identify and apply appropriate safety measures and troubleshoot common issues in foundation construction.

SLO Mapping:

Prerequisite Course SLO	Linked SLO from this Course	Explanation
VCARP 101-	SLO 1 & 2	Describe the structure and key components of the construction industry. Identify and properly use basic construction tools and materials.

Links to Program Learning Outcomes:

SLO	Linked PLO	I/P/M	Explanation of Link
1	1	I	Demonstrate basic construction fundamentals
2	2	I	Demonstrate basic framing and finishing fundamentals
3	6	I	Demonstrate and practice essential employability skills
4	1	I	Demonstrate basic construction fundamentals
5	3	I	Practice construction safety precautions

Course Content: Students in this course will be introduced to/understand/master:

1. Introduction to Foundations
 - Understanding the role of foundations in construction projects
 - Basic types of foundations: shallow and deep
 - Importance of following codes and standards
2. Basics of Soil and Site Evaluation
 - Introduction to different soil types and their characteristics
 - Simple soil testing methods suitable for small projects
 - Steps to prepare a construction site for foundation work
3. Beginner-Level Blueprint Reading

- Identifying key symbols and features in construction drawings
- Understanding basic load concepts
- Choosing simple foundation types based on visual guides
- 4. Materials and Basic Tools
 - Overview of commonly used materials: concrete, rebar, and gravel
 - Introduction to basic tools for foundation work
 - Safe handling and storage of materials and tools
- 5. Simplified Construction Techniques
 - Digging and preparing a trench for small footings
 - Setting and securing basic forms
 - Hands-on practice with mixing and pouring concrete
 - Introduction to placing basic reinforcement materials
- 6. Safety and Beginner Building Codes
 - Essentials of local building codes and why they matter
 - Introduction to OSHA safety guidelines for foundation work
 - Basic PPE and site safety practices for novices
- 7. Common Problems and Easy Fixes
 - Spotting simple foundation issues like cracks or poor drainage
 - Easy repair techniques for beginners
 - Tips to avoid common beginner mistakes

Higher Order Thinking Skills

- ☒ Analyzing the basic elements of an idea, experience, or theory
- ☐ Making judgements about the value or soundness of information, arguments, or methods
- ☒ Applying theories or concepts to practical or in new situations

Recommended Methods of Instruction

- ☒ Demonstration
- ☒ Lecture
- ☒ Small group discussion
- ☒ Class discussion
- ☒ Audio-Visual Aids
- ☐ Laboratory
- ☒ Supervised Practice
- ☐ Field Trips
- ☒ Other:

Recommended Assessment Tool Type(s):

- ☐ Case Study
- ☐ Critique of Performance
- ☒ Exam/Quiz In-Course
- ☐ Exam/Quiz Standardized (attach narrative describing development and validation process)
- ☐ Focus Group
- ☒ Group Project
- ☒ Individual Project
- ☐ Observation
- ☐ Portfolio Review
- ☐ Presentation
- ☐ Simulation
- ☐ Skill Performance
- ☐ Supervisor Evaluation
- ☐ Survey
- ☒ Written Assignment

**Required Forms of Regular and Substantive Interaction for Hybrid or Distance Education Courses
(Select at Least Two):**

- ☐ Direct instruction through:
- ☐ Live video lectures
 - ☐ Live audio-only lectures
 - ☐ Live text chats
- ☐ Assessing or providing feedback on a student's coursework
- ☐ Providing information or responding to questions about the content of a course or competency through
- ☐ Live video discussions
 - ☐ Live audio-only discussions
 - ☐ Live text chats
- ☐ Facilitating a group discussion regarding the content of a course or competency through:
- ☐ Live video discussion
 - ☐ Live texts chats
 - ☐ Asynchronous message boards or text chats
- ☐ Other, specify:

Note: for distance education courses, if only two are selected, both must occur within the course on a weekly basis. If more than two are selected, the instructor may choose which two are used during each week.

Equipment and Materials:

Textbook: Feirer, M. D., & Feirer, J. L. (2003). *Carpentry & building construction: Student text* (Student ed.). Glencoe/McGraw-Hill School Publishing. ISBN 978-0078227028

Tools and Equipment:

- Shovels, trenching tools, and wheelbarrows
- Levels and measuring tapes
- Concrete mixers and vibrators
- Rebar cutters and bending tools
- Trowels, floats, and screeds
- Safety gear: hard hats, gloves, boots, and safety glasses

Materials:

- Concrete mix and gravel
- Rebar and reinforcement materials
- Wooden and metal forms
- Curing agents and sealants
- Plastic sheeting for moisture control

Connection to College Mission:

The College of the Marshall Islands will provide our community with access to quality, higher and further educational services, prioritize student success through engagement in relevant Academic, Career and Technical Education, and be a center for the study of Marshallese Culture. It will also provide intellectual resources and facilitate research specific to the needs of the nation. EC approved 4th Nov, 2020. BOR approved 1st December, 2020 This course provides students the essential tools in understanding the mathematical concepts that can be used as tools to a more critical and analytical thinking for a scientific

understanding of events and phenomena to further develop the quest for more academic endeavors and to equip students with the numeracy skills needed for daily living.

Connection to Department Mission:

The mission for the vocational Carpentry program is to provide quality non-credit vocational courses for students to gain employment, pursue post-secondary education and develop an appreciation for life-long learning.

Approved by IEC on October 25,2017