



NDET 117: INITDANHATIANI TA DEVIT

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Catalog Description

Introductory course that explores the fundamentals and techniques of communicating graphically in the construction industry. Students will use computer-aided design and building information modeling to replicate a project's construction documents and complete a small group project.

Prerequisites

DRFT 114 or equivalent college course with a minimum grade of C

Validation

Validation Type

Sequential - Same Discipline

Course

DRFT 114

Complete the Prerequisite/Corequisite Objectives and provide sound quantitative research to document the need for the requisite.

Method of Instruction:

Laboratory

Lecture and/or Discussion

Course Units/Hours:

Course Units Minimum:

Lecture Hours Minimum (week)

Lab Hours Minimum (week)

3



Total Contact Hours Minimum (semester)

105

Total Outside Hours Minimum (semester)

105

Total Student Learning Minimum Hours (semester)

210

Repeatability:

No

Open Entry/Exit:

Yes

Field Trips:

Not Required

Grade Mode:

Standard Letter

TOP Code:

095300 - * Drafting Technology

SAM Code:

C - Clearly Occupational

Course Content

Methods of Assessment:

Mulitple choice tests
Portfolio Evaluation
Problem solving assignments or activities
Problem solving quizzes or exams
Project
Skill demonstrations

Course Topics:

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	Course Topics
1	Revit Basics: Overview of linework & modify tools.
2	Revit Basics: Drawing 2D architectural Objects.
3	Floor Plans: exterior / interior walls and doors, windows and curtain walls
4	Roof, Floor & Ceiling Systems
5	Vertical Circulation
6	Structural System
7	Annotation: text, dimensions, tagging, shared parameters and keynoting
8	Elevations, sections and details
9	Interior Design: Toilet room, cabinets, furniture and interior furring
10	Schedules: room and door tags
11	Mechanical Systems: Intro to Mech and Plumbing tools
12	Electrical Systems: Intro to electrical tools
13	Site & Rendering: Intro to site tools and creating exterior / interior renderings.
14	Construction Documents: set of working drawings.



Course Objectives:

	Course Objectives
1	Understand basic Autodesk Revit tools and techniques
2	Recreate a building project in Revit from scratch, covering BIM process of architecture, interior design, structural, MEP.
3	Generate a group project in Revit.

Course Outcomes:

	Course Outcomes
1	Identify and describe Revit system components by completing an extensive industry standard construction document set.
2	Prepare and coordinate group project and generate construction documents.

Assignments:

Assignment Type:	Details
Reading	Students will be required to read chapters per the syllabus. Also will read and follow instructions for drawing assignments.
Homework	Students will be assigned drawings to complete
Lab	Students will be required to complete portfolios during lab
Writing	Students will be required to answer chapter reviews at the end of each chapter

Textbooks or other support materials

Resource Type:	Details
Books	Design Integration Using Autodesk Revit 2024 ISBN: 978-1-63057-584-7

Equity Review:

No

Transferable to CSU

Yes - Proposed

Transferable to CSU Justification

Fresno State ARCH 18 (or CM 18). Cal Poly State University San Luis Obispo to introduce a Revit class in 2026

CSU General Education

Transferable to CSU

This course will also be proposed for UC transfer.

Yes

Other Degree Attributes

Degree Applicable Not a Basic Skills Course

Materials Fee:

20

Banner Title:

Introduction to Revit