

Introduction



MKS 537E – Intro to CAE

Course plan

Week 1	ENGINEERING DESIGN & THE DESIGN PROCESS
Week 2	IMPACT OF CAE ON ENGINEERING DESIGN
Week 3	CAD HARDWARE & SOFTWARE
Week 4	COMPUTER GRAPHICS
Week 5	COMPUTER AIDED GEOMETRIC DESIGN
Week 6	WIREFRAME MODELING
Week 7	SURFACE MODELING
Week 8	SOLID MODELING & ASSEMBLY MODELING
Week 9	NUMERICAL METHODS IN DESIGN ANALYSIS
Week 10	COMPUTER AIDED PROCESS PLANNING
Week 11	CAM HARDWARE & SOFTWARE
Week 12	DATA COMMUNICATION AND NETWORKING
Week 13	COMPUTER INTEGRATED MANUFACTURING
Week 14	SYSTEM SIMULATION

Course materials

<http://transport.itu.edu.tr/dersler/lisansustudersleri/mks537e>



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ANASAYFA HAKKIMIZDA ▼ DERSLER ▼ ARAŞTIRMA ▼ YAYINLAR ▼ LABORATUVAR EĞİTİM BAĞLANTILAR BLOG İLETİŞİM

ANASAYFA

+

 HAKKIMIZDA

-

 DERSLER

+

 Lisans Dersleri

-

 Lisansüstü Dersleri

ABT 505

MKS 533

MKS 537E

MKS 540

MKS 546

MKS 584E

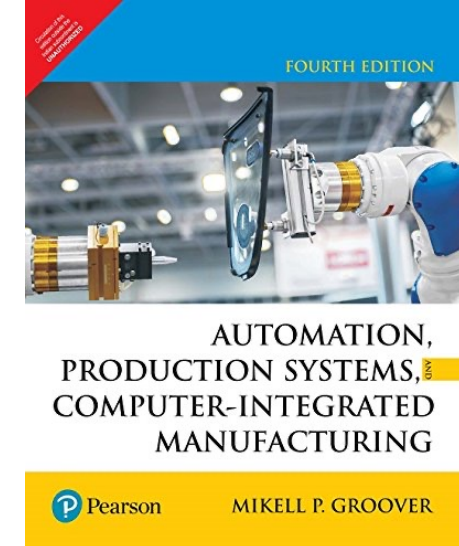
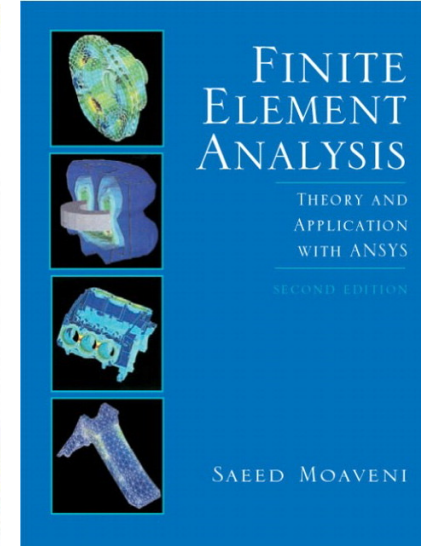
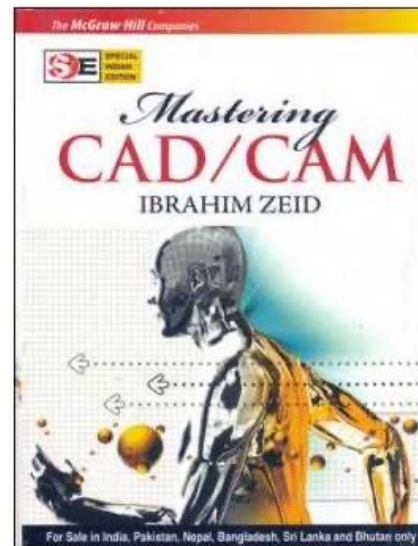
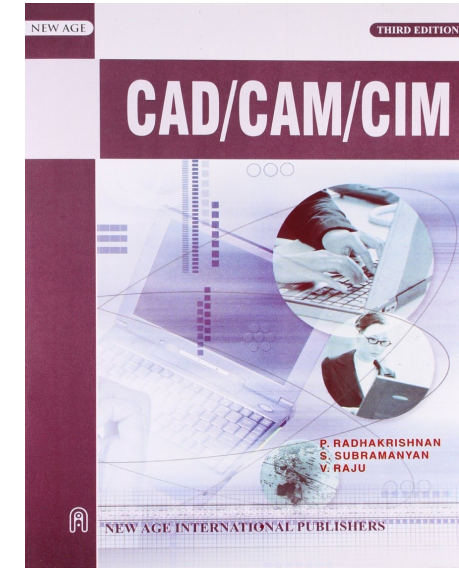
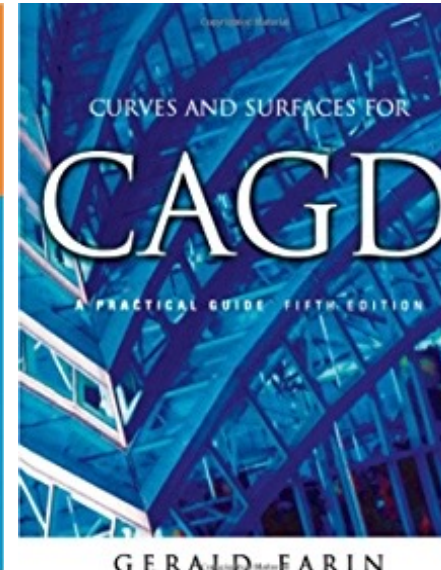
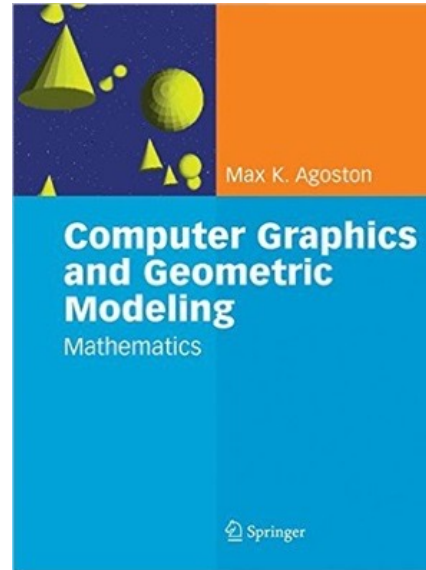
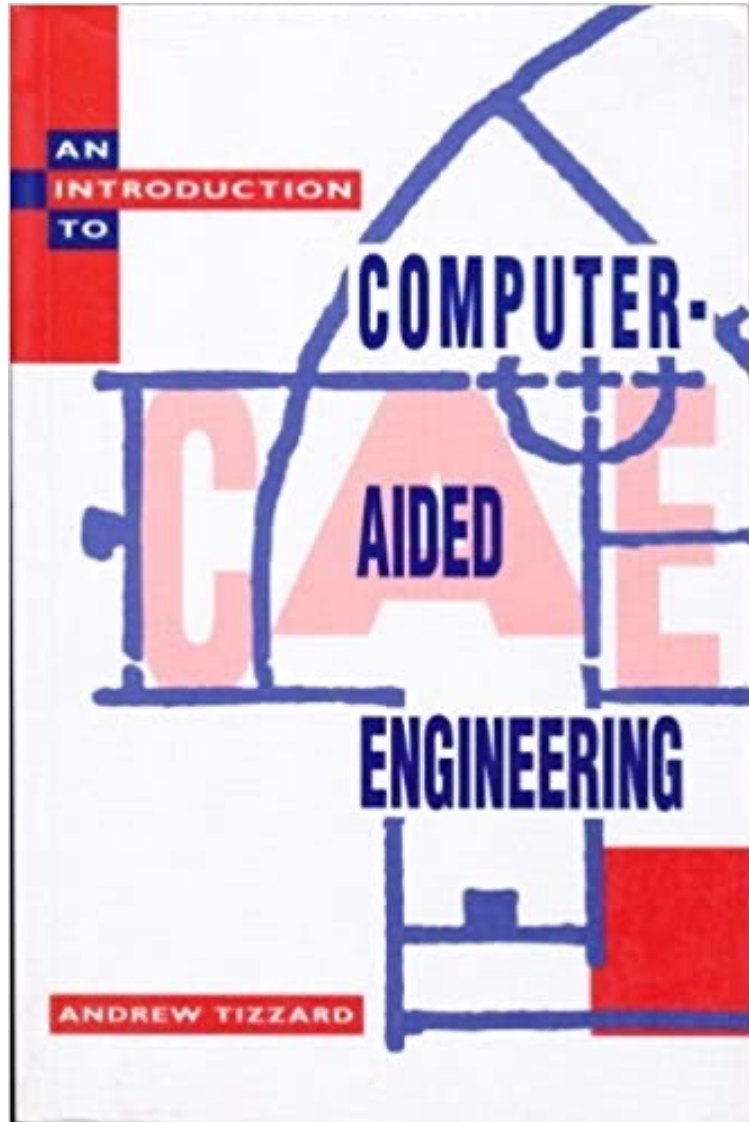
MKS 537E Introduction to Computer Aided Engineering

3+0 (3 credits) (3 ECTS credits)

Assessment Criteria	
Term Success Grade	
Midterm Exam (1)	50%
Term Project (report presentation)	20%
Homeworks	30%
Final Grade	
Term Success Grade	60%
Final Exam	40%

Documents
Syllabus
Course Catalogue Form
Course Notes
Scores

Course materials



Course notes

<http://transport.itu.edu.tr/dersler/lisansustudersleri/mks537e/coursenotes>



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ANASAYFA

+ HAKKIMIZDA

+ DERSLER

+ ARAŞTIRMA

Course Notes

- Lecture 1 - Engineering Design
- Lecture 2 - Impact of CAE on Engineering Design
- Lecture 3 - CAD Hardware and Software

Course Resources



<https://ninova.itu.edu.tr/Ders/20644/Dosyalar>

The screenshot shows the Ninova web interface. The header features the 'ninova' logo and navigation tabs for NİNOVA, CAMPUS, COURSES, and HELP. A breadcrumb trail indicates the current location: 'Where Am I: Ninova / Campus / MKS 537E / Course Resources'. On the left, there are links to 'Return to Campus' and 'Return to Course', and a 'Quick Actions' menu with options to 'Add File', 'Add Link', and 'Accessibility'. The main content area is titled 'Course Resources' and includes a toolbar with 'Home', 'Parent Directory', 'Upload File', 'Add Link', 'Delete', and 'Add Folder'. Below the toolbar is a table listing course resources.

	Files ↓	Size ↓	Date ↓
<input type="checkbox"/>	BOOKS	577 MB	28 September 2021 18:12
<input type="checkbox"/>	NOTES	330 MB	28 September 2021 18:12
<input type="checkbox"/>	Chapter_0-Welcome.pdf	315 KB	18 October 2020 19:37
<input type="checkbox"/>	Chapter_10-CAM.pdf	4 MB	18 October 2020 19:41

Homework

<http://transport.itu.edu.tr/dersler/lisansustudersleri/mks537e/homeworks>



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ANASAYFA
+ HAKKIMIZDA
+ DERSLER
+ ARAŞTIRMA
+ YAYINLAR

Homeworks

Homeworks will be announced on the NINOVA web site and uploaded here.

<https://ninova.itu.edu.tr>

Homework

<https://ninova.itu.edu.tr/Ders/20644/Sinif/81722/Odevler>

The screenshot displays the Ninova ITÜ e-Öğretim Merkezi website. The header features the Ninova logo and navigation tabs for NİNOVA, CAMPUS, COURSES, HELP, and ABOUT. A welcome message "Welcome, Cev" is visible in the top right. Below the header, a breadcrumb trail reads "Where Am I: Ninova / Campus / MKS 537E / CRN: 14286 / Homeworks". The main content area is titled "Homeworks" and contains the message "You do not have any homeworks on the system." On the left sidebar, there are links for "Return to Campus", "Return to Course", and "Return to Class", along with a "Quick Actions" section containing "Add Homework". On the right sidebar, there is a "Help" section with the text "Your listed".

Welcome, Cev

ninova
İTÜ e-Öğretim Merkezi

NİNOVA CAMPUS COURSES HELP ABOUT

Where Am I: Ninova / Campus / MKS 537E / CRN: 14286 / Homeworks

Return to Campus
Return to Course
Return to Class

Quick Actions
Add Homework

Homeworks

You do not have any homeworks on the system.

Help
Your listed

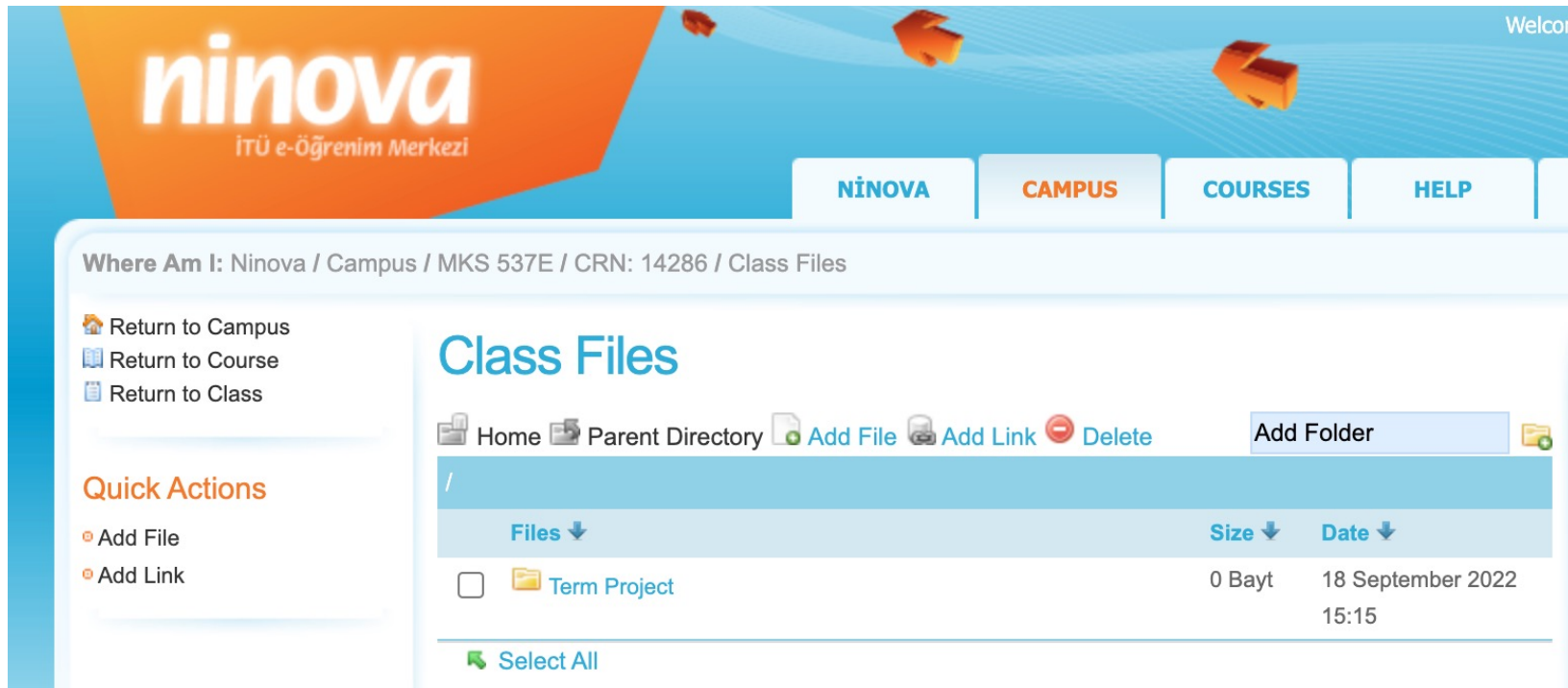
Term project

<http://transport.itu.edu.tr/dersler/lisansustudersleri/mks537e>


By surveying recent literature, write a (max. 10 pages) report and prepare a 30 minute oral presentation one of these topics. Submit your report both in hard copy and pdf file format.

Term project

Term projects will be published on the web page as PDF after each student has completed their presentation. Presentations within the scope of the term project are included in the course topics and may appear as questions in the exams.



The screenshot displays the Ninova ITÜ e-Öğretim Merkezi interface. The header features the Ninova logo and navigation tabs for NİNOVA, CAMPUS, COURSES, and HELP. A breadcrumb trail indicates the current location: Where Am I: Ninova / Campus / MKS 537E / CRN: 14286 / Class Files. On the left, there are links to Return to Campus, Return to Course, and Return to Class, along with Quick Actions for Add File and Add Link. The main content area, titled 'Class Files', includes a toolbar with Home, Parent Directory, Add File, Add Link, Delete, and Add Folder. Below this is a table listing files:

Files ↓	Size ↓	Date ↓
<input type="checkbox"/>  Term Project	0 Bayt	18 September 2022 15:15

At the bottom of the table, there is a 'Select All' button.

Assessment

