SAICE

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MFT Computing

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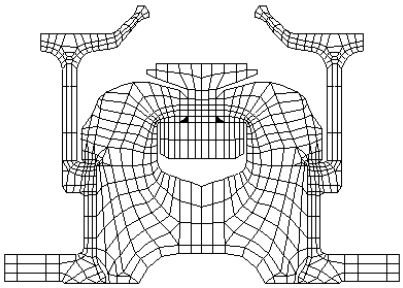


The Application of the Finite Element Method in Practice Course Schedule for 2006

Course Verification Number SAICEstr06/00018/08

Town	Venue	From	To
Cape Town	Stellenbosch Univ., Bellville Campus	26 June	30 June
Johannesburg	Rand Afrikaans University	3 July	7 July
Durban	Bytes Technology Centre	17 July	21 July
Johannesburg	Rand Afrikaans University	4 September	8 September
Johannesburg	Rand Afrikaans University	27 November	1 December

The Application of the Finite Element Method in Practice

Introduction

Introductory courses on the finite element method of analysis are frequently held at universities and elsewhere in South Africa. There is, however, to our knowledge, no organization in this country offering instruction on the practical application of the method. This course will fill that gap.

Course Background and Details

Finite element programs are readily available, easy to run and offer one of the most powerful tools available to the analyst today. However, the results can be dangerously misleading under certain circumstances unless the user has a proper understanding of the method and its potential pitfalls.

The course comprises hands-on use of finite element programs complemented with lectures. This course is not only essential for all users of finite element analysis (FEA) software, but also for managers to understand what they can expect to get from FEA.

The course “The Application of the Finite Element Method in Practice” has been presented since 1986 with regular modifications and enhancements. Its original duration was 20 days. This has now been compressed to 5 days.

The following topics will be covered:

Linear structural analysis for various types of elements and combinations thereof,
Non-linear analysis (material, geometric, boundary conditions),
Buckling,
Dynamics (natural frequencies, dynamic response).

Important topics will be discussed in detail, such as “How accurate is finite element analysis?” and “How do I model point loads correctly?”.

Hardware and software will be provided on the course, but participants are invited to bring their own if they prefer to do so. Participants are also invited to bring their own problems for discussion on the course.

Course Presenter

The course will be presented by Roland Prukl, Pr.Eng, Dipl.-Ing, FSAICE, AIStructE. He has delivered eight papers on finite element analysis at various FEMSA symposia, at SEMC2001 and most recently at IASS-IACM-2005 at Salzburg/Austria. Mr. Prukl has also been invited to deliver FEA lectures at universities and technikons in Europe.

As a user and distributor of finite element software over a period of thirty years, Mr. Prukl has been involved with several thousand practical problems and has built up an extensive experience in finite element modelling.

The purpose of the course is to pass on some of this experience to scientists, engineers and technicians in the civil, structural, mechanical and electrical engineering fields as well as related disciplines such as shipbuilding, aeronautical engineering and the automotive industry.

Cost

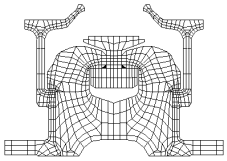
The cost of the 5-day course is R7500 (incl..VAT) which includes light lunches, teas and a comprehensive set of course notes.

Full time students will pay R4500 (incl. VAT). A discount of 25% will apply for registration of the third and subsequent delegates from the same firm (students excluded).

Course Format

The Work will commence at 08:00 and will finish at 17:00.

The attendance will be limited to 20 delegates on a first-come first-served basis. It is therefore essential to book as early as possible, to avoid disappointment.



Registration Form –
FINITE ELEMENT METHOD IN PRACTICE
Presented by Roland Prukl, Pr.Eng.

Please return to Dawn Hermanus fax (011) 805-5971 or e-mail dhermanus@saice.org.za.
Should you wish to contact us - Tel: (011) 805-5947/8

Date	**Venue**

Please complete one form for each delegate:

DELEGATE REGISTRATION			**Please print clearly**		
First Name:		Surname:			
Title:	Prof.	Dr.	Mr.	Mrs.	Ms.
Name of Firm / Organisation:					
Invoice to be made out to:					
Postal Address:					
Town / City:					
Post/Zip Code: Country (if other than RSA):					
Telephone No: ( )		Fax No: ( )			
Cell No: ( )		E-mail Address:			
For catering purposes:					
Vegetarian	Kosher	Halaal	Other:		
Amount Due: R					
Signature:					

Registration fee: Cost per Delegate: R7 500.00 incl. VAT
Full Time Students: R4 500.00 incl. VAT

A discount of 20% will apply for registration of the third and subsequent delegates from the same firm (students excluded).

Full course fees will be charged in the event of non-attendance or cancellation.
SAICE reserves the right to cancel the course in the event of less than 12 registrations.
Please note that no delegate will be allowed to attend the course without <u>proof of payment</u>.

Method of Payment: Direct Deposit: Standard Bank, Parktown
Branch code: 000355 Account number: 200 853 058

Please fax deposit slip with the registration form to (011) 805-5971.