



Goa University

Electronics Discipline, School Of Physical & Applied Sciences
in association With
Directorate of International Cooperation & Exchange, Goa University

Report on workshop “Mathematical Methods & Structural Analysis”

1. Title of the Event/Activity/ program	“Mathematical Methods & Structural Analysis”
2. Date and Time	17 th – 21 st July 2023
3. Mode of conduct (Physical/Online)	Physical
4. School/ Directorate/ Section	Electronics Discipline, SPAS
5. Collaborating Agency/School/ Directorate	<ul style="list-style-type: none">• Directorate of International Cooperation & Exchange, Goa University• Civil Department, Goa College of Engineering, Farmagudi, Ponda, Goa (Day 4)• Civil Department, Don Bosco College of Engineering, Fatorda, Goa (Day 5)
6. Detail of the Resource Person	<p>Dr. Miguel Ângelo Carvalho Ferraz Professor, Civil Engineering Department, Faculty of Engineering, University of Porto, Portugal.</p> <p>Awarded a mobility grant for staff under the MOBILE 2 BE Project to Goa University.</p> <p>Area of expertise: Civil Engineering in particular, the development and application of numerical models of structural analysis.</p>

7. Organising Committee	Prof. Rajendra Gad Dr. Aniketh Gaonkar Dr. Marlon Sequeira Dr. Bhargav Alavani
8. Number of Faculty & Students attended/ participated	Day 1: 21 Day 2: 16 Day 3: 23 Day 4: 27 Day 5: 20
9. The objectives of the Program/activity/event	To have exposure to Mathematical Methods & Structural Analysis using Excel and VBA for the students.
10. Description of the Program/activity/event	<p>A workshop was conducted by the School Of Physical & Applied Sciences in association With the Directorate of International Cooperation & Exchange, Goa University, from 17th to 21st July 2023 at the School Of Physical & Applied Sciences (SPAS) and Affiliated Engineering colleges of Goa University.</p> <p>From day 1 to day 3, i.e., from 17th – 19th July 2023, the workshop was conducted at SPAS, Goa University, where the Physics & Electronics discipline participants (students & Faculties) attended the event.</p> <p>Day 4 (20th July 2023) of the workshop was held for the engineering students of the Civil Department, Goa College of Engineering, Farmagudi, Ponda, Goa.</p> <p>Day 5 (21st July 2023) of the workshop was held for the engineering students of the Civil Department, Don Bosco College of Engineering, Fatorda, Goa.</p> <p>A total of 70 participants participated in the workshop.</p>
11. Benefit/Key outcomes of the Program/activity/event	<ul style="list-style-type: none"> • Participants got an opportunity to learn the detailed use of mathematical methods & structural analysis (for civil engineering students) using Excel and VBA, which they can use in any type of analysis during their projects. • During the workshop, under expert guidance, participants could explore Excel

	and VBA, including different formulae and analysis approaches.
12. Enclosures with report	<ol style="list-style-type: none">1. Brochure (Goa University, GEC, DBCE)2. Attendance3. Geo-tag photos



Dr. Rajendra Gad
Professor, SPAS



Prof. Kaushtubh R.S. Priolkar
Dean, SPAS

Seal



Mathematical Methods & Structural Analysis

Assistant Professor Miguel Ferraz
Faculty of Engineering of University of Porto, Portugal

In relation with his visit to the Goa University, assistant professor Miguel Ferraz will conduct a workshop in five sessions on the topic "Mathematical Methods & Structural Analysis"

**Session 1 Personal and University of Porto presentation
Microsoft Excel tutorial**

July 17, 2023 (10.00 am) – SPAS, Goa University

Session 2 Modelling Physics with Microsoft Excel & VBA

July 18, 2023 (10.00 am) – SPAS, Goa University

Session 3 Modelling Physics with Microsoft Excel & VBA

July 19, 2023 (10.00 am) – SPAS, Goa University

Session 4 Structural Analysis with Microsoft Excel & VBA

July 20, 2023 (10.00 am) – Civil Department, Goa
College of Engineering, Farmagudi, Ponda, Goa

Session 5 Structural Analysis with Microsoft Excel & VBA

July 21, 2023 (10.00 am) – Civil Department, Don Bosco
College of Engineering, Fatorda, Goa

Note

The use of a personal/group computer with Excel installed is recommend

Organized by:

School of Physical & Applied Sciences and Directorate of International
Cooperation & Exchange, Goa University



Govt. of Goa

Goa College of Engineering
Farmagudi, Ponda -Goa

www.gec.ac.in

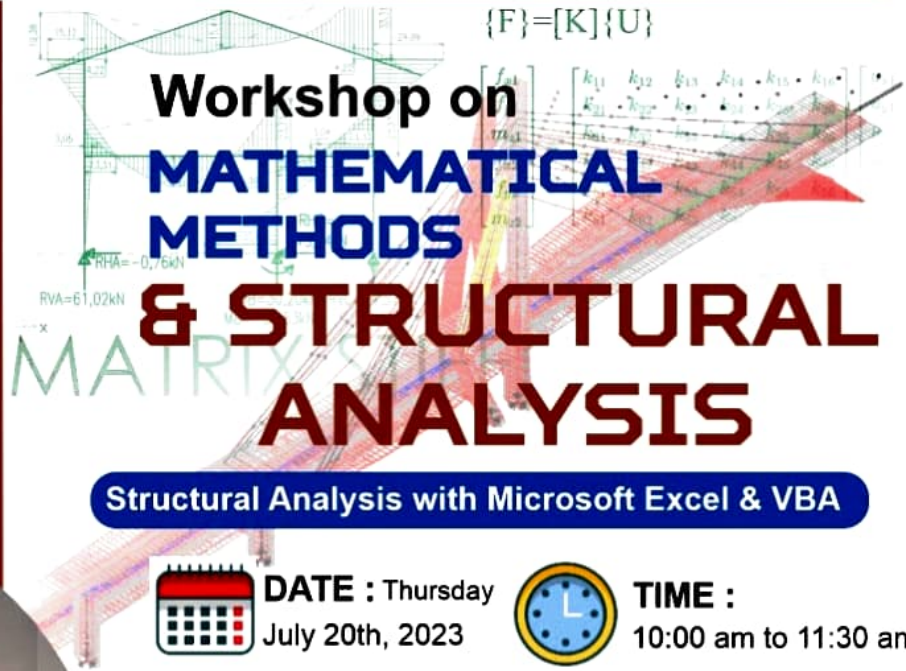
Department of Civil Engineering

School of Physical & Applied Sciences and Directorate of International
Cooperation & Exchange, Goa University

U.PORTO
FEUP FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO



GOA UNIVERSITY
गोंय विद्यापीठ



Workshop on **MATHEMATICAL METHODS & STRUCTURAL ANALYSIS**

Structural Analysis with Microsoft Excel & VBA



DATE : Thursday
July 20th, 2023



TIME :
10:00 am to 11:30 am



Dr. Miguel Ferraz

Faculty of Engineering
University of Porto
Portugal

Prof. Miguel Ferraz is the professor at the Civil Engineering Department of the Faculty of Engineering of University of Porto in Portugal. His area of expertise is civil engineering in particular the development and application of numerical models of structural analysis.

Dr. Miguel will be conducting a workshop on the development of numerical models for structural analysis using Microsoft Excel and Visual Basic programming.

The workshop is beneficial to both M.E. and BE students interested in Structural Engineering Domain. it is requested that all interested students to attend the workshop.

The use of Personal/ group computer with Excel installed is Recommended.

VENUE:

**Civil Engineering Dept
Seminar Hall**

All are requested to be seated
in seminar hall by 9.45 AM

Dr. Krupashankara M.S
Principal

Dr. K. G. Guptha
HOD - Civil Engg

Dr. A.K.S. Bhaduria
Prof- Civil Engg

Dr. Ganesh Hegde
Prof- Civil Engg

Mathematical Methods & Structural Analysis

Assistant Professor Miguel Ferraz
Faculty of Engineering of University of Porto, Portugal

In relation with his visit to the Goa University, assistant professor Miguel Ferraz will conduct a workshop in five sessions on the topic "Mathematical Methods & Structural Analysis"

- Session 1 Personal and University of Porto presentation
Microsoft Excel tutorial**
July 17, 2023 (10.00 am) – SPAS, Goa University
- Session 2 Modelling Physics with Microsoft Excel & VBA**
July 18, 2023 (10.00 am) – SPAS, Goa University
- Session 3 Modelling Physics with Microsoft Excel & VBA**
July 19, 2023 (10.00 am) – SPAS, Goa University
- Session 4 Structural Analysis with Microsoft Excel & VBA**
July 20, 2023 (10.00 am) – Civil Department, Goa
College of Engineering, Farmagudi, Ponda, Goa
- Session 5 Structural Analysis with Microsoft Excel & VBA**
July 21, 2023 (10.00 am) – Civil Department, Don Bosco
College of Engineering, Fatorda, Goa

Note

The use of a personal/group computer with Excel installed is recommend

Organized by:

School of Physical & Applied Sciences and Directorate of International
Cooperation & Exchange, Goa University



U. PORTO
FEUP FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO



GOA UNIVERSITY
गोंय विद्यापीठ

Sl. No.	Name	Sem.	Signature
1	Fausto Vasco Da Gama	VII	
2	Shubhankshi Motilal Naik	IV	
3	Vijay Dhanraj	IV	
4	Darvete Gomes	ME-IV	
5	Janhavi M. Desai	ME-IV	
6	KIRAN MIRASHI	BE-VIII	
7	AIDAN MESQUITA	BE-VIII	
8	WALTER TAVARES	BE-VIII	
9	Pratyaksh Komarpant	BE-VIII	
10	Prathmesh. F. Gaonkar	BE VIII	
11	Abel Andrade	IV	
12	Lynn Rodrigues	TE-VI	
13	Judith Fernandes	TE-VI	
14	Sahara R. Naik	ME-IV	
15	Rishikesh Naik	ME-IV	
16	Saisha Naik	ME-IV	
17	Kajal K. Kudnelkar	ME-IV	
18	Sonia Vasco Da Gama	ME-IV	
19	Nikhil D. Thakur	ME-IV	
20	Gaurang R. S. Talankar	ME-IV	
21	Riya Naik	ME-IV	
22	Gautami Kandalkar	ME-IV	
23	Akhil Chopdekar	ME-IV	
24	Shifa Gaonkar	ME-IV	
25	Ganraj Naik	ME-IV	
26	Sakshi Barkar	BE-I	
27	Zaihanavi. Kamat	BE-I	

SCHOOL OF PHYSICAL AND APPLIED SCIENCES
ELECTRONICS

 GPS Map Camera

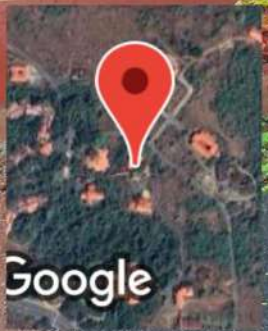
Taleigao, Goa, India

FR6M+6M7, Goa University, Taleigao, Goa 403206, India


Lat 15.46048°

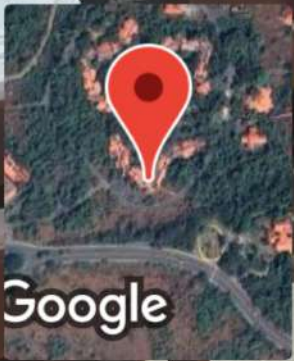
Long 73.834247°

19/07/23 01:27 PM GMT +05:30





 **GPS Map Camera**



Taleigao, Goa, India


MDR3, Goa University, Taleigao, Goa 403206, India

Lat 15.459531°

Long 73.832238°

17/07/23 12:00 PM GMT +05:30



 **GPS Map Camera**

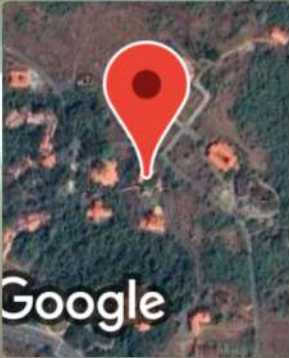
Taleigao, Goa, India

FR6M+6M7, Goa University, Taleigao, Goa 403206, India


Lat 15.460515°

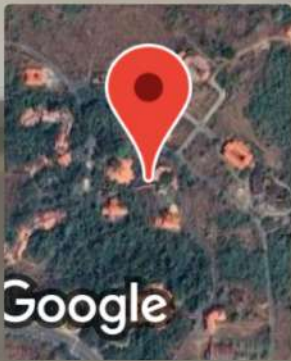
Long 73.834261°

19/07/23 12:41 PM GMT +05:30





 **GPS Map Camera**



Taleigao, Goa, India


FR6M+6M7, Goa University, Taleigao, Goa 403206, India

Lat 15.460445°

Long 73.834077°

19/07/23 01:24 PM GMT +05:30



 **GPS Map Camera**

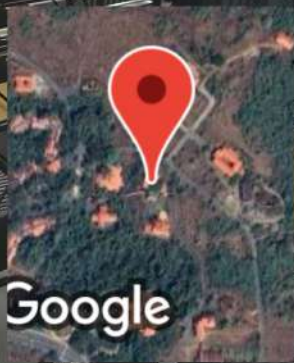
Taleigao, Goa, India

FR6M+6M7, Goa University, Taleigao, Goa 403206, India

Lat 15.460515°

Long 73.834261°

19/07/23 12:41 PM GMT +05:30





 **GPS Map Camera**



Margao, Goa, India

Office 19, FIIRE, Don Bosco College, Fatorda, Margao, Goa 403602,
India

Lat 15.292723°

Long 73.969516°

21/07/23 05:17 PM GMT +05:30















