



# Online Foundation Course in Mathematics

## OFCM-2022 : An MTTS Online Training Programme

[Organized under the aegis of MTTS Trust]

**16 October – 05 November, 2022**

Funded by the National Board for Higher Mathematics

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### THE PROGRAMME

OFCM is an MTTS initiative consisting of six online regional camps on mathematical foundations for second year undergraduate students in Mathematics. The programme is being organized by the MTTS Trust since 2020, and about five hundred students drawn from different parts of the country who have just completed their second semester are trained following the interactive MTTS methodology through these camps on online platforms.

There will be six simultaneous regional camps each admitting about 80 participants. The programme will be organized online on the Zoom platform and will be supported by class communications through Moodle.

The Mathematics Training and Talent Search (MTTS) programme is one of the most popular and significant training programmes in India. This programme has been running since 1993 and has made an impressive impact on mathematical scene in the country.

### THE FOUNDATION COURSE

This is a unique course taught in MTTS Programmes to initiate the students to some fundamental concepts in Mathematics.

After attending a 2-week course on Foundations in the MTTS camps, almost all participants so far have experienced a change in their attitude, problem solving abilities and logical and analytical thinking. They also acquire a high level of confidence for self-study to undertake courses in higher mathematics.

The objective of the regional camps is to transfer the positive changes that the Foundation course brings to MTTS participants, to many more students across the country.

### SELECTION

The selection will be on merit, based on consistent good academic records and recommendations submitted by the teachers. The list of selected candidates will be posted on MTTS website along with instructions for confirmation of participation and further guidelines for registration, etc. Only selected candidates will be informed of their selection by email.

### ACADEMIC PLAN

This will be a short course with Logic, Sets, Functions and Equivalence Relations as components based on the book "A Foundation Course in Mathematics" by Ajit Kumar, S. Kumaresan and B.K. Sarma.

In each camp, there will be four sessions each week, with three on alternate weekdays (Monday-Saturday), and one on Sunday. All sessions, except possibly on Sunday, will be in the afternoon/evening, so that the regular college schedule of the participants is not effected. Each session will consist of an interactive lecture (75 minutes) followed by a group discussion (40 minutes).

The faculty members will be active mathematicians from various leading institutions with a commitment to teaching. There will be a number of Mentors (who are previous MTTS participants and experienced teachers and researchers) in each camp helping the students during discussion sessions in groups. The aim of the instruction is not to give routine lectures but to stimulate the participants to think and discover mathematical ideas and results.

PROGRAMME DIRECTOR: **Prof. S. Kumaresan**, Hyderabad

### IMPORTANT DATES

- Online application: Opens on **25 August, 2022** and Closes on **22 September, 2022**.
- Last date for receiving (online) recommendation from teachers: **23 September, 2022**
- Publishing of the list of selected students: **30 September, 2022** (on MTTS website)
- Confirmation of participation by the selected students: on or before **10 October, 2022**.
- Programme dates : **16 October – 05 November, 2022**.

In case of any difficulty, write to [foundations.mtts@gmail.com](mailto:foundations.mtts@gmail.com).

### ELIGIBILITY AND APPLICATION PROCEDURE

#### ELIGIBILITY:

**Undergraduate students, who have completed in 2022 one year (two semesters) of their B.Sc./B.A./Integrated M.Sc. programme, with Mathematics as one of their main subjects.**

#### APPLICATION PROCEDURE:

- Apply online using the form:  
<https://forms.gle/LLUSYUeR1S1kLM5S9>
- The form and other details of the programme are also available in webpage: <https://mtts.org.in/programme/ofcm-2022/>
- After submitting the application, the student must inform the teacher mentioned in the application, and ensure that the teacher submits her/his recommendation within the deadline by filling the form:  
<https://forms.gle/vm6merZYuH9oQWxcA>

### ABOUT MTTS TRUST

MTTS-TRUST is a non-profit educational trust primarily engaged in organizing all activities under the MTTS umbrella. If you wish to organize an MTTS Programme or contribute to MTTS in any way (financial or otherwise), please get in touch with us by writing to [mttstrust@gmail.com](mailto:mttstrust@gmail.com).  
Website: [www.mtts.org.in/mtts-trust](http://www.mtts.org.in/mtts-trust)

