



Online Foundation Course in Mathematics

OFCM2024: 18 – 31 August, 2024

Organized under the aegis of MTTS Trust

Funded by the National Board for Higher Mathematics



ABOUT MTTS & OFCM

MTTS: The Mathematics Training and Talent Search (MTTS) programme has been a very popular and significant training programme in India, since its inception in 1993. The MTTS camps have made an impressive impact on mathematical scene in the country. All camps since 2018 are being organized by the MTTS Trust.

OFCM: The Online Foundation Course in Mathematics (OFCM) is an initiative of the MTTS Trust. The annual programme, being conducted since 2020, consists of six online regional camps. More than five hundred second/ third semester undergraduate students are selected to attend this programme through a national level screening process. The content is based on the Foundation course taught in MTTS programmes, and they are trained following the interactive MTTS methodology through the OFCM camps.

OFCM2024: There will be six simultaneous regional camps each admitting about 80–90 participants. The programme will be organized online on the Zoom platform and will be supported by class communications through MTTS Classroom (Moodle).

Programme Director:

Prof. S. Kumaresan, GITAM University, Visakhapatnam

THE FOUNDATION COURSE

This is a unique course taught in MTTS programmes to initiate students to some fundamental concepts in mathematics.

After attending a two-week Foundation course in the MTTS summer camps, most of the participants have observed improved logical and analytical thinking, problem solving abilities, and experienced a change in their attitude. They also acquire a high level of confidence for self-study to undertake advanced courses in mathematics, as is evident from their feedback.

The objective of the OFCM camps is to scale up this positive impact of the Foundation course to a larger group of students, and achieve this aim by making it accessible to many students across the country. These camps expose more bright young minds to the excitement of doing mathematics, promoting independent mathematical thinking, and preparing them for advanced material.

ACADEMIC PLAN

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

Each camp will consist of twelve sessions, starting on Sun, 18th Aug, 2024, and ending on Sat, 31st Aug, 2024. There will be one session each day, with breaks on Thu, 22nd Aug, and Tue, 27th Aug. All sessions will start at 5:00 p.m., so that the regular college schedule of the participants is not affected. Each session will consist of an interactive lecture (75 minutes) followed by a group discussion (45 minutes).

The aim of the instruction is not to give routine lectures but to stimulate the participants to think and discover mathematical ideas and results. The instructors will be active mathematicians from various leading institutions, who are well known for their commitment to teaching. They will be ably supported by a team of experienced mentors in each camp. These mentors are alumni of MTTS, experienced teachers and researchers, who will help the students during group discussion sessions.

ELIGIBILITY AND APPLICATION PROCEDURE

WHO CAN APPLY? Undergraduate students, who have just completed their 2 semesters, or are currently in the 3rd semester of their B.Sc./B.A./Integrated M.Sc. programme, with Mathematics as one of their main subjects.

HOW TO APPLY? The application procedure is ONLINE. To see the link to the application system, please visit the programme webpage <https://mtts.org.in/programme/ofcm2024>.

- The applicant must give the details of a teacher in her/his application who will be ready to submit recommendations for the applicant.
- 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 online recommendation form. **Note:** *The link to submit the online recommendation will be sent to the email address of the teacher from the online application system.*

In case of any queries, or difficulty, please see the FAQ section on the programme webpage. If the issue is still not resolved, please write to foundations.mtts@gmail.com.

IMPORTANT DATES

- Online application: Opens on **Sunday, 23 June, 2024**
Closes on **Saturday, 3 Aug 2024**.
- Last date for receiving recommendation from teachers (online): **Sunday, 4 Aug 2024**
- Publishing of the list of selected students on the MTTS Website: **Monday, 12 Aug 2024**
- Confirmation / Registration by the selected applicants: on or before **Thursday, 15 Aug 2024**.
- Preparatory meeting & Inauguration: **Saturday, 17 Aug 2024**.
- Programme dates: **Sunday 18 August – Saturday 31 August, 2024**.

SELECTION

The selection will be on merit, based on consistent, and good academic records, and recommendations submitted by the teachers. *It is the applicant's responsibility to ensure that the teacher submits her/his recommendation in time.*

The list of selected candidates will be posted on the MTTS website along with further instructions and guidelines. Only selected candidates will be informed of their selection by email.

ABOUT MTTS TRUST

The 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 see the Trust website <https://mtts.org.in/mtts-trust>, or get in touch with us by writing to mttstrust@gmail.com.

