## Hooghly Engineering \& Technology College

 About HETCHooghly Engineering and Technology College (HETC) is a self-financed engineering college run by the Hooghly Engineering \& Technology College Society, promoting technical education amongst students and disseminating scientific knowledge in society. The institute is affiliated with the Maulana Abul Kalam Azad University of Technology (formerly WBUT). The Government of West Bengal recognizes it, and the All India Council for Technical Education (AICTE) approves its courses.
HETC is in Hooghly of Hooghly district in West Bengal, India. It is 1.9 km ( 1.2 miles) from the Hooghly railway station and approximately $800 \mathrm{~m}(2,600 \mathrm{ft})$ from the Hooghly Ghat railway station. Hooghly Engineering and Technology College offers undergraduate programs in engineering disciplines. The College provides B.Tech in Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical Engineering, and Mechanical Engineering. The institution is committed to promoting research and providing quality education through its dedicated management, faculty, and staff members. HETC has grown into one of West Bengal's leading educational institutes within 18 years by offering various stimulating environments for its stakeholders' intellectual development, free-thinking, and personal growth. The motto of HETC is to challenge students with dynamic learning opportunities and provide them with the skills, insights, attitudes, and practical experiences required to take up societal responsibilities. With so much to offer, it's only natural that HETC students have a one-of-a-kind opportunity to carve a niche for themselves in their chosen field of study, allowing them to become well-rounded and discriminating citizens who are completely qualified for their chosen vocations in the workplace.


About the Civil Engineering Department

The Department of Civil Engineering started its journey from the College's inception nearly two decades back. Ever since, the Department has been successfully creating new knowledge, acquiring new capabilities, and at the same time, producing an intelligent human resource pool contributing to various domains of society. The development of expertise in the Department is commendable. Keeping the Department's vision in mind, the holistic growth of the students is focused upon, which instills a habit of continued learning with a sense of responsibility to contribute to the betterment of society. Besides, the students are encouraged to participate in internships, workshops, and seminars essential for developing practical knowledge. The Department has always been on a high growth path, primarily relying on experienced and dedicated faculty members working zealously and enthusiastically with a strong commitment to engineering education. Consequently, the Department provides Civil Engineering aspirants with a vibrant and optimum learning environment.

## CHAIRPERSON

PROF. TARAK KUMAR BANDYOPADHYAY
COORDINATOR
MS. ARPITA DAS
CO-COORDINATORS DR. TANUMOY GHOSH DR. RAJDIP PAUL

3-DAY WORKSHOP ON "ADVANCED SURVEYING USING DGPS AND TOTAL STATION"

28-30TH MARCH 2023
ORGANIZED BY
CIVIL ENGINEERING DEPARTEMNT OF HETC

Hooghly Engineering \& Technology College Vivekananda Rd, Pipulpati Post, Chinsurah,
West Bengal 712103

## Objective

The objective of the 3-day workshop is to offer comprehensive technical know-how on practical applications of Total Station (TS) and Digital Global Positioning System (DGPS) as advanced surveying techniques. In detail, the workshop will take up system concepts, design, operation, implementation, and applications of both TS and DGPS. Besides, detailed information on the GPS signal, its processing by the receiver, and the techniques by which GPS obtains position, velocity, and time are also under the scope. The specific objectives of the workshop are as follows:

- To gain an understanding of the measurement of angles, vertical and horizontal.
- To know the correct surveying terminology when using a total station
- To use the Total Station in a practical situation.
- To record the absolute location of any object.
- To comprehensively introduce GPS and DGPS technology, system concepts, design, operation, implementation, and applications, including critical information on DGPS concepts.
- To provide detailed information on the GPS signal, its processing by the receiver and the techniques by which GPS obtains position, velocity, and time.
- To present current information on the status, plans, schedule, and capabilities of GPS and other satel-lite-based systems with position velocity and time determination applications.
- To fill in technical information gaps for those in the GPS and GNSS fields.

ADVANCED SURVEYING WORKSHOP USING DGPS AND TOTAL STATION 98

| DATE | SESSION | EVENT | TIME |
| :---: | :---: | :---: | :---: |
| 28 March | 1st | INAUGURATION | 10:00 A.M. T0 10:30 A.M. |
|  |  | TEA BREAK | 10:30 A.M. T0 10:45 A.M. |
|  |  | INTRODUCTORY LECTURE BY MR. SUVOBRATA CHOSH | 10:45 A.M. T0 01:00 P.M. |
|  | BREAK |  | 01:00 P.M. T0 02:00 P.M. |
|  | 2nd | INTRUMENT SPECCICATION ABOUTTOTAL STATION AND DIFFERENTIAL CLOBAL POSTITONING SSSTEM (DCPS) | 02:00 P.M. To 03:00 P.M. |
|  |  | TEA BREAK | 03:00 P.M. TO 03:15 P.M. |
|  |  | SETTING UP THE TOTAL STATION IN THE FIELD | 03:15 P.M. T0 05:00 P.M. |
| 29 March | 1st | TOPOCRAPHY SURVEY USING TOTAL STATION | 10:00 A.M. To III:30 A.M. |
|  |  | TEA BREAK | 11:30 A.M. To 11:45 A.M. |
|  |  | LAYOUT PREPARATION USING TOTAL STATION | 11:45 A.M. To 01:00 P.M. |
|  | BREAK |  | 01:00 P.M. TO $02: 00$ P.M. |
|  | 2nd | STATC CLOBAL POSTIIONINO SYSTEM SURVEVING | 02:00 P.M. To 03:00 P.M. |
|  |  | TEA BREAK | 3.30 P.M. T0 03.15 P.M. |
|  |  | REALTTME KINEMATIC AND DCPS | 03:15 P.M. To 05:00 P.M. |
| 30 March | 1st | STAKE OUT POINTS WITH DCPS | 10:00 A.M. TO III:30 A.M. |
|  |  | TEA BREAK | 11:30 A.M. To 11:45 A.M. |
|  |  | DATA PROCESSING OF TOTAL STATION | 11:45 A.M. To 01:00 P.M. |
|  | BREAK |  | 01:00 P.M. T0 02:00 P.M. |
|  | 2nd | DATA PROCESSING OF DCPS | 02:00 P.M. To 03:00 P.M. |
|  |  | TEA BREAK | 3:00 P.M. T0 03.15 P.M. |
|  |  | Closing session | 03:15 P.M. T0 04:00 P.M. |

## REGISTRATION DETAILS

- The workshop is open to the faculty of Academic Institutions, UG, and diploma students and Professionals from Industry.
- The Registration fee for faculty of Academic Institutions and

Industry Professionals is Rs. 300/- and for UG and diploma students is Rs. 100/-.

- Participants need to register themselves by filling out the google form link https://forms.gle/mXDNTW7UV8mGLBPH9
- Pay the registration fee in the following bank account:

Account No - 50339432106
Hooghly Engineering \& Technology College
Bank - INDIAN BANK
Branch - Chinsurah
IFSC code: IDIB000C593
The last date for receipt of the registration form is 25 th March 2023. Selected participants will get an email acknowledgment on $26^{\text {st }}$ March 2023.

## Address for Communication

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