

On entering the student is asked to state whether he wishes to be trained as a mechanical or electrical engineer, or as a consulting or industrial chemist. In any of these cases he will find mapped out for him a complete course of study, involving laboratory instruction, tutorial work, attendance at lectures, exercises in mathematics, geometrical, mechanical, and architectural drawing, and instruction in the workshops. Evening courses in almost every branch of pure and applied science have been arranged at very moderate fees, and in their anxiety that no properly qualified person should be debarred from attending classes through inability to pay fees, the governors have arranged that apprentices, learners, and improvers, under the age of twenty-one years, may be admitted to all classes and courses at half-fees, on production of their employer's certificate.

THE prospectus of the Belfast Municipal Technical Institute for next session has been received. The object of the institute is to provide instruction in the principles of those arts and sciences which bear upon the industries of Belfast, and to show by experiment how these principles may be applied to their advancement. A day technical course has been established to give instruction in mechanical engineering, electrical engineering, the textile industries, and pure and applied chemistry. The course provides a sound training for youths who aim at filling positions of responsibility in various industries. A trade preparatory school, which constitutes a junior section of the day technical department, provides a specialised training for boys who are intended for industrial occupations. The evening classes are suitable for persons engaged during the day who desire to supplement the knowledge and experience gained in the workshop or warehouse. The needs of women are catered for in the same complete manner as those for men. It is not possible here to enumerate all the interesting ways in which the technical instruction committee has endeavoured to assist local industries, but mention may be made of the public textile testing and conditioning house which has been opened in the institute. It undertakes the examination of textile materials with the view of ascertaining their true weight, length, strength, and so on; and it carries out such other investigations as manufacturers and others may desire.

PAMPHLETS giving full particulars in connection with the faculty of medical sciences and with the faculty of engineering for the coming session have been published by University College, London. The college faculty of medical sciences comprises the departments of physics, chemistry, botany, and zoology (the preliminary medical sciences), also the departments of anatomy, physiology, and pharmacology (the intermediate medical sciences), and the departments of hygiene and public health, and of pathological chemistry (post-graduate study). Full preliminary and intermediate courses of study are provided for students desirous of obtaining the medical degrees of the University of London, as well as for students seeking the qualifications of other universities and licensing bodies. Each of the departments is also equipped for more advanced work, and provides facilities for research. The faculty of engineering, including the departments of mechanical, heating and ventilating, electrical, civil and municipal engineering, is intended to provide for students wishing to devote themselves to engineering a systematic training in the application of scientific principles to industrial purposes. The courses are also suited to the requirements of students who intend to enter for appointments in the Indian Public Works Department, Engineering Department of the General Post Office, Department of the Direc-

tor of Engineering and Architectural Works in the Admiralty, Patent Office, and other similar services, or of those who intend to become patent agents, technical teachers, and chemical engineers. The engineering departments have been recognised by the Board of Trade as providing suitable technical training for marine engineers. Facilities are provided for post-graduate and research work in all the subjects.

THE Yorkshire Summer School of Geography, organised this year by the University of Leeds, completed a successful inaugural session on August 23. More than a hundred students were in residence for three weeks at and near Whitby, the headquarters being in the new buildings of the County School, which were kindly lent for the purpose by the governors. Systematic instruction in the methods of modern geographical study was aimed at by choosing Yorkshire as a representative area, and studying as exhaustively as possible all the factors and relationships connected with its structure and location. A course of five lectures on the physical geography and special geological features of the district was given by Prof. P. F. Kendall, together with lectures on the North Sea, and on meteorology by Mr. A. Gilligan. This led to the study of special topics of industrial or historical character, including plant distribution and agriculture (Dr. W. G. Smith), metalliferous and coal mining (Mr. A. Gilligan), the textile and metallurgical industries, ports, fisheries and communications (Mr. L. Rodwell Jones), prehistoric Yorkshire (Prof. P. F. Kendall), the Roman occupation (Mr. P. W. Dodd), Saxon and Danish Yorkshire (Mr. W. G. Collingwood), mediæval Yorkshire (Mr. H. B. McCall), architecture (Mr. S. D. Kitson), place-names and language (Prof. Moorman), Old Whitby as a port (Mr. E. H. Chapman), and river development (Prof. Kendall). The course concluded with two lectures on the teaching of geography by Mr. W. P. Welpton. The practical work included the reading and enlargement of topographical maps, the examination of typical rocks, the making of models and microscope sections, field surveys, and the reading and construction of meteorological charts. Frequent excursions were made to places of geological and industrial interest in the neighbourhood, and an afternoon was devoted to the study of a typical Yorkshire farm, with large-scale plans showing the rotation of crops on each field for the past four years.

SOCIETIES AND ACADEMIES.

CALCUTTA.

Asiatic Society of Bengal, August 6.—E. Digby. Nor'-westers and monsoon prediction. Nor'-westers have hitherto received little scientific attention. The entire literature is covered by a monograph by Sir John Eliot in 1876 and certain observations in a paper of his in 1910 on the anemographic records of Saugor Island. His observations and deductions are summarised. The structure of a typical nor'-wester is analysed. Its form and motion appear to show it is not a cyclonic eddy but a rectilinear splitting of the still-air layer between the lower southerly and upper northerly wind, which takes place transversely to the direction of motion of the storm mass. The absence of hail and the rapidity of the motion support this theory. A typically complete nor'-wester indicates a strong northerly upper current, and therefore the probability that the advance of the monsoon will be delayed. Weak or ill-formed nor'-westers indicate a weak upper current and little opposition to the monsoon. The factors that require study are briefly enumerated and divided into those which can be noted by individual observers and those which require co-ordinated effort.