



**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY
(PHARMACY INSTITUTE), GREATER NOIDA, U.P. 201306**

A Report on
Advanced Certification in Nutraceuticals: Science, Applications,
and Regulations

Noida Institute of Engineering and Technology (Pharmacy Institute), Greater Noida, organized a short-term certification course for Bachelor of Pharmacy students on the topic **“Advanced Certification in Nutraceuticals: Science, Applications, and Regulations”** from **February 5th to 9th, 2024**. A three-day certification course on **"Advanced Certification in Nutraceuticals: Science, Applications, and Regulations"** was conducted to provide participants with in-depth knowledge of nutraceuticals and their impact on human health. The course covered scientific principles, practical applications, and regulatory frameworks governing nutraceutical products.

On the first day, the session was inaugurated by **Dr. Rupa Mazumder**, Dean, NIET (Pharmacy Institute), who introduced the fundamentals of nutraceuticals, including their classification, sources, and role in disease prevention. The session also explored various bioactive compounds such as polyphenols, probiotics, and omega fatty acids, emphasizing their mechanisms of action. The second day, **Dr. Sushma Talegaonkar**, Associate Professor, DIPSAR, explored the formulation and development of nutraceutical products, which include innovative delivery systems, bioavailability enhancement, and stability considerations. On next days of the session, **Dr. L.K. Ghosh**, Jadavpur University, and **Dr. Harish Dureja**, Professor, MDU, Rohtak explored the case studies and their findings on nutraceutical interventions for conditions like cardiovascular diseases, diabetes, and gut health. The final day was addressed by **Dr. R.N. Gupta**, Professor, BIT Mesra, who explored the regulatory and quality control aspects. Global guidelines from organizations like the **FDA, FSSAI, and EFSA** were discussed, along with good manufacturing practices (GMP) and safety evaluation techniques. The course concluded with an interactive session on emerging trends, challenges, and business opportunities in the nutraceutical industry. Participants gained valuable insights into the growing field of nutraceuticals, equipping them with essential skills to navigate research, development, and compliance in this evolving sector.

