Flexible Training, Distance Learning

NCTM can address any training need in any format – from instructional workshops on industry trends and technology advancements to hands-on training in cGMP environments, to online learning at your own pace. Current workers can learn new skills to continue to meet the demands of a rapidly changing industry, while new hires gain a running start, thus reducing the need for on-the-job training and avoiding missed production runs.

Learn more at nctm.tamu.edu.

“The NCTM offers some of the most interactive and realistic pharmaceutical manufacturing training environments that are available on the market today.”

GERRY FARRELL
Vice President, Technical Operations
Fujifilm Diosynth Biotechnologies

Biomanufacturing Technical Certification

A hands-on training program in upstream and downstream biomanufacturing processes, fermentation and protein purification, aseptic techniques, QA/QC, documentation practices, regulatory protocol, safety, and business ethics.

- Introduction to Therapeutics Manufacturing
- Understanding the Science of the Biotherapeutics Industry
- cGMP Procedures and Documentation
- Biopharmaceutical Facility Operations
- Safety in the Pharmaceutical Industry
- Upstream Manufacturing of Biologics
- Downstream Manufacturing of Biologics
- Quality Unit Operations
- Becoming a Valued Employee

“Continuing Education Courses

Our courses are developed and delivered by industry-experienced instructors and academic experts, incorporating principles of engineering and science in a variety of focus areas, including bioprocess equipment operations; process development, optimization, and scale-up; monitoring, analysis and testing; GLP, and GMP.

- Vacciology 101
- Quality by Design (QbD)
- Quality Control Approaches in Vaccine Development
- Multi Platform Cell Culture Techniques
- Bioprocess Dynamics & Control
- Bioreactors & Upstream Bioprocessing
- Bioseparations & Downstream Processing
- Vaccine Adjuvants & Delivery Systems
- Regulatory Compliance in the Pharmaceutical Industry
- Human Error & Resilience in Biomanufacturing Systems
- Pharmaceutical Supply Chains
- Corrective and Preventative Actions (CAPA)
State-of-the-Art Facilities

The NCTM offers 152,000 square feet of workforce development and contract biomanufacturing space. Educational accommodations include:

• GMP Training Suite equipped with modern upstream and downstream bioprocess equipment to simulate commercial pharmaceutical manufacturing environments
• Cell Culture & Tech Laboratory outfitted to teach process development, optimization, and scale-up of different cell cultures
• Analytical Instructional Laboratory demonstrates in-process testing using modern analytical technology and techniques
• 48-Workstation Wet Lab equipped to teach a variety of scientific classes
• Conference Halls provide interactive distance learning environments, serving 75 and 125
• Simulation Software Training Laboratory with 48 SMART technology computers equipped with modeling and optimization software

NCTM’s training equipment includes stirred-tank bioreactors (5L-125L), lab and pilot skids, incubators, shakers and cryotanks, automated vial filling machine, and much more. Visit our website for a complete list.

Investing in the Future

The NCTM understands that ensuring a continued labor pool for the pharmaceutical industry requires multi-generation workforce development. That’s why we offer a comprehensive program encompassing education at all levels, including:

• Continuing Education Courses
• Technical Training and Certification
• Customized Contract Training
• Online Courses
• BioFORCE STEM Summer Programs

NCTM, NATIONAL CENTER FOR THERAPEUTICS MANUFACTURING

WORKFORCE DEVELOPMENT PROGRAMS

Industry-driven biopharmaceutical training and education

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