





"The need to train incoming personnel is always a slow-down for companies, losing precious time that is best spent serving clients.

This course reduces that initial up-front indoctrination, allowing new entrants to gain those basic skills in a safe environment, enabling them to 'hit the ground running' once they begin their new roles."

– Robert Wilkinson, PMP/ASEP/ACP/H&OPP Human and Organizational Performance Lead Advocate

Modular BRaTT

- Completely customizable program
- Reduces employee training expenses
- Decreases preventable mistakes
- Better data
- Removes basic skills gaps

Together, we can create a well-rounded BRaTT program that meets your organizational training needs.

For more details, please contact:
Laura Moore: 314-513-4052
Betsy Boedeker: 314-513-4966

CenterforPlantandLifeSciences@stlcc.edu

St. Louis Community College

BRDG Park at the Donald Danforth Plant Science Center
1005 N. Warson Rd | St. Louis, MO 63132



Modular BRaTT

Biomanufacturing, Research and Technical Training

A completely customizable program to meet your team's training needs.

St. Louis Community College



"They purposefully create moments of stress and organized chaos, opportunities for mistakes and real manufacturing situations in an environment that welcomes mistakes while requiring detailed and concise written explanations.

All of this to reduce the likelihood of those mistakes occurring in their daily industrial environment."

– Christie VanValkenburgh
Sr. Project Manager,
ThermoFisher St. Louis

Modular Biomanufacturing, Research and Technical Training (BRaTT), is a three-day, individualized, hands-on professional training series offered in-person each month.

We bring employees together, whether newly hired or experiencing basic skills gaps, into a small group environment that welcomes mistakes and provides a safe space to ask questions.

Immersing employees in broad but intensive training/practice sessions, BRaTT returns them to the workplace armed with functional skills capable of contributing on day one.

Given the significant costs associated with employee training and preventable mistakes, Modular BRaTT is an invaluable addition to any training program in the life sciences industry. It optimizes company resources, ensuring efficient and effective training.

MODULAR BRaTT TRAINING SERIES:

Days One and Two typically contain standard content and activities, offered on the first Monday and Tuesday of the month. Day Three builds upon Days One and Two and is customized with instruction focused on the areas most important to your organization.

DAY 1 | BASIC LAB SKILLS + LAB MATH

- Weighing
- Serological and micro pipetting
- Hemocytometry, cell counting
- Basic microscopy
- Lab math

DAY 2 | SAFETY AND GDP, REGULATORY

- Lab safety, PPE
- Notebooks, logbooks, and batch records
- Methods and SOPs
- Audits

DAY 3 | BASIC QUANTIFICATION AND ANALYTICS, BUFFERS AND MEDIA

- What is a buffer?
- pH meters and probes
- Conductivity and osmotic strength
- Aliquoting–revisit simple lab math
- UV/Vis spectrophotometry
- Standard curve and determination of an unknown

DAY 3 | BSC AND CONTAMINATION, GOWNING, CELL HANDLING

- BSC vs. Laminar flow hood
- Cell passaging
- PPE + gowning
- Autoclaves and Pyrogen ovens
- Handling flames and bactoincinerators
- Filters and processing for sterility

DAY 3 | BIOPROCESSING FOR PROTEIN WORK

- Enzyme characterization
- Filtration
- UV/Vis spectrophotometry
- HPLC quantification
- Protein analytics
- Protein production

DAY 3 | HORTICULTURE AND PLANT HANDLING

- Extraction of plant DNA
- Greenhouse management
- Staining
- Growth chambers
- Callous tissue culturing
- Plant phenotyping
- Seeds, propagating, cloning
- Disposing of materials

DAY 3 | DNA HANDLING, SEQUENCING, PCR, DDPCR, QPCR, FRAGMENT ANALYSIS

- Mini preps
- Centrifugation
- Florescence, Flow cytometry
- UV absorbance
- Gel electrophoresis
- Sequencing and PCR