سرفصل های پایان نامه های بیوتکنولوژی دارویی

زمینه های تحقیقاتی این رشته به دو دسته زیر تقسیم می شود:

- ۱. بنیادی (Basic)
- ر. صنعتی و تولیدی (Industrial Development and Production). صنعتی و تولیدی

زیر مجموعه های هر یک از بخشهای فوق به شرح زیر می باشد:

- 1. Pharmaceutical Biotechnology Research related to Bio-therapeutics including Recombinant Proteins/ Antibodies/ Nucleic acids/ Peptides/ Nucleic Acid based Vaccines/ Cell based therapeutic
 - o Design and discovery
 - o Expression systems (Prokaryotic and Eukaryotic)
 - o Protein or cell line engineering
 - o Microorganism engineering
 - o Enzymes
- 2. Industrial Development and Production Process for bio-therapeutics
 - o Research and Development
 - o Characterization and Bioanalytical Aspects
 - o Biosimilars (all aspects of development and production)
 - Upstream and Downstream Development
 - Peptides / small molecules with application for industrial development of biopharmaceuticals
 - o Pharmacokenetics and Pharmacodynamics of biopharmaceutical
 - Development of human disease and Pk/PD cell based or animal models including all relative aspects (Genome editing tools, etc.)
 - o Formulation
 - Process Optimization and Validation
 - Information management (depositing, retrieval, etc) in the Biopharmaceutical industry
- 3. Regenerative Medicine as drug-screening tools, and regenerative therapies.
- 4. System biology and multi-omic approaches applicable to biopharmaceutical's production, validation, etc.