College of Medicine
Tucson

Bachelors of Science in

MEDICAL DEVICE DEVELOPMENT AND APPLICATION

Medical Device Technology

The Medical Device Technology emphasis focuses on device design, innovation, and development, preparing students to contribute to the creation of cutting-edge healthcare solutions. This emphasis also explores the role of big data in advancing individualized health care, equipping students with the skills to analyze and apply data for more precise and effective patient outcomes. Additionally, it highlights the clinical applications of medical technology, emphasizing how these innovations are implemented in real-world healthcare settings to improve diagnosis, treatment, and overall patient care.

Sample 4-Year Plan

FLOWCHART BELOW IS SUBJECT TO CHANGE AND FOR SAMPLE PURPOSES ONLY. PLEASE CONSULT WITH YOUR ADVISOR TO EXPLORE YOUR PERSONAL ACADEMIC NEEDS/SITUATION.

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
ENLG 101	ENGL 102	PHYS 110	PHYS 111	PSIO 202 AND LAB	BNAD 303	GENERAL ELECTIVE	EMPHASIS ELECTIVE
MATH 112	CHEM 130 AND 130L	ECOL 182R AND 182L	GenEd: Building Connections	SURG 497	BME 481A	GENERAL ELECTIVE	EMPHASIS ELECTIVE
Second Language	MCB 181R AND 181L	GenEd: Exploring Perspectives - Artist	EMPHASIS ELECTIVE	PHCL 386	LAW 480B	LAW 478A	GENERAL ELECTIVE
UNIV 101	MATH 263	ACCT 250	PSIO 201 AND LAB	BNAD 302	LAW 479B	BSM 441	GENERAL ELECTIVE
GenEd: Building Connections	ECON 200	SURG 201	BSM 305	GenEd: Exploring Perspectives - Humanist	GenEd: Building Connections	EMPHASIS ELECTIVE	GENERAL ELECTIVE
SURG 101					UNIV 301 GENED PORTFOLIO		
15 UNITS	17 UNITS	16 UNITS	17 UNITS	16 UNITS	15 UNITS	15 UNITS	15 UNITS

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Emphasis Electives

Course	Units	Notes
BME 295C Challenges in Biomedical Engineering	1	
BME 486 Biomaterial-Tissue Interactions	3	
BSM 319 The History of Medical Technology	2	
CMM 465 Fundamentals of Light Microscopy and Digital Imaging	3	
HSD 401 Design for Health Workshop: Addressing Human Health Challenges with Design Thinking	3	(Gen Ed Building Connections)
HSD 410 Device Design in the Health Sciences: Developing Tools for Health Care Solutions using Design Thinking	3	Junior or Senior standing AND previous completion of Calculus I (MATH 122B, or MATH 125, or equivalent transfer course), or with instructor permission.
HSD 420 Healthy Design Practices: From the Makerspace to the Community	3	
LAW 476A Drug Discovery, Development, and Innovation to Reach the Marketplace	3	
MED 497 Research Development and Publishing	3	
PHP 205 Fundamentals of Telehealth	3	