

I ANNO			
TITOLO DEL CORSO	CFU	SSD	NOTE
Biomechanics of human motion	6	ING-IND/34 SSSA	Caratterizzante
Advanced signal processing	6	ING-INF/03 UNIFI	Affine
Bioinspired computational methods <ul style="list-style-type: none"> • Neural and fuzzy computation • Biological data mining 	6+6	ING-INF/05 UNIFI	Affine
Applied Brain Science <ul style="list-style-type: none"> • Behavioral and Cognitive neuroscience • Computational neuroscience 	6+6	MPSI/02 INF/01 UNIFI	Affine
Materials and instrumentation for bionics engineering <ul style="list-style-type: none"> • Instrumentation and measurement for bionic systems • Soft and smart materials 	6+6	ING-INF06 ING-IND34 SSSA	Caratterizzante
	[48 CFU]		

Corsi a scelta [12 CFU]			
TITOLO DEL CORSO	CFU	SSD	NOTE
Economic assessment of medical technologies and robotics for healthcare	6	SECS-P/08 SSSA	Scelta
Electronics for neural activity monitoring	6	ING-INF/01 UNIFI	Scelta
Principles of Bionic Engineering	6	ING-IND/34 SSSA	Scelta
Neuromorphic engineering	6	ING-IND/34 SSSA	Scelta

II ANNO			
TITOLO DEL CORSO	CFU	DOCENTE di RIFERIMENTO	NOTE
Neural Engineering (42 CFU)			
Social robotics and affective computing <ul style="list-style-type: none"> • Social robotics • Affective computing 	6+6	ING-INF/06 UNIFI	Caratterizzante
Neural Prostheses <ul style="list-style-type: none"> • Neural interfaces and bioelectronic medicine • Neural Tissue engineering 	6+6	ING-IND/34 SSSA ING-INF/06 UNIFI	Caratterizzante
Bionic senses	6	ING-INF/06 UNIFI	Caratterizzante
Integrative cerebral function and imaging processing <ul style="list-style-type: none"> • Integrative cerebral function • Advanced image processing 	6+6	MPSI/02 ING-INF/06 UNIFI	Affine+ Caratterizzante

II ANNO			
TITOLO DEL CORSO	CFU	DOCENTE di RIFERIMENTO	NOTE
Biorobotics (42 CFU)			
Human and animal models in biorobotics	6	ING-IND/34 SSSA	Caratterizzante
Prosthetics and Rehabilitation robotics <ul style="list-style-type: none"> Artificial limbs Robotic exoskeletons 	6+6	ING-IND/34 SSSA	Caratterizzante
Robotics for surgery and targeted therapy <ul style="list-style-type: none"> Robotics for minimally invasive therapy Miniaturized therapeutic and regenerative systems 	6+6	ING-IND/34 SSSA	Caratterizzante
Robotics for Assisted Living <ul style="list-style-type: none"> Robot companions for assisted living Cloud robotics 	6+6	ING-IND/34 SSSA	Caratterizzante

II ANNO			
COMUNI (18 CFU)			
Lab Training	3		Tirocini formativi e di orientamento
Final test	15		