

		Students from MAT bachelor degree	CFU	Students from BIO bachelor degree	CFU
first year – I semester	compulsory	096240 Mathematical methods for materials engineering MAT/07	5	093699 Introduction to materials science ING-IND/22	5
		054191 Mechanical behaviour and failure of metals ING-IND/14	10	093698 Introduction to nanotechnology FIS/03	5
		094954 Bioingegneria chimica [2] ING-IND/34 096236 Mechanics of biological structures ING-IND/34 098454 Strutture bioartificiali e biomimetiche ING-IND/34	1x5	096240 Mathematical methods for materials engineering MAT/07	5
		085858 - Biomeccanica ING-IND/34 083122 Progettazione di endoprotesi [C.I.] ING-IND/34 096253 Fenomeni di trasporto nei sistemi biologici ING-IND/34	1x10		
			083122 Progettazione di endoprotesi [C.I.] ING-IND/34 096253 Fenomeni di trasporto nei sistemi biologici ING-IND/34	1x10	
			096236 Mechanics of biological structures ING-IND/34 098454 Strutture bioartificiali e biomimetiche ING-IND/34	1x5	
first year – II semester		054335 Surface engineering ING-IND/23 054192 Impianti e fenomeni di trasporto ING-IND/23 089726 Micromechanics ING-IND/34	2x5	054335 Surface engineering ING-IND/23 054192 Impianti e fenomeni di trasporto ING-IND/23 089726 Micromechanics ING-IND/34	2x5
		089473 Solid state physics FIS/03 085888 Fisica dello stato solido FIS/03	1x10	089473 Solid state physics FIS/03 085888 Fisica dello stato solido FIS/03	1x10
		085851 Informatica e elementi di informatica medica [1] ING-IND/05, ING-INF/06	10	054296 Medical informatics ING-INF/06	10
second year – I semester		054185 Instrumental methods for materials analysis ING-IND/22 054185 Chemistry of materials CHIM/07	1x5	054185 Instrumental methods for materials analysis ING-IND/22 054185 Chemistry of materials CHIM/07	1x5
		054188 Principles of polymer chemistry ING-IND/22 054188 Principi di chimica dei polimeri ING-IND/22	1x5	054188 Principles of polymer chemistry ING-IND/22 054188 Principi di chimica dei polimeri ING-IND/22	1x5
		052517 Mechanical behaviour and durability of polymers ING-IND/22	10	052517 Mechanical behaviour and durability of polymers ING-IND/22	10
		054339 Corrosion engineering of metals and ceramics ING-IND/22	10	054339 Corrosion engineering of metals and ceramics ING-IND/22	10

second year – II semester	083047 Biomateriali [C.I.] ING-IND/34 054297 Life support systems ING-IND/34 083061 Costruzioni biomeccaniche ING-IND/34	2x10	083047 Biomateriali [C.I.] ING-IND/34 054297 Life support systems ING-IND/34 083061 Costruzioni biomeccaniche ING-IND/34	2x10
	053464 Advanced numerical methods for coupled problems MAT/o8 098502 Applied physical chemistry ING-IND/23 096205 Biomedical physical chemistry ING-IND/23 083449 Brevetti e proprietà industriale ING-IND/35 089724 Composite materials for structural applications ING-IND/22 + ICAR/o8 094942 Nanomedicine - Principles and applications ING- IND/23 099300 Soft matter: the structure and rheology of complex fluids FIS/o3	1x5	053464 Advanced numerical methods for coupled problems MAT/o8 098502 Applied physical chemistry ING-IND/23 096205 Biomedical physical chemistry ING-IND/23 083449 Brevetti e proprietà industriale ING-IND/35 089724 Composite materials for structural applications ING-IND/22 + ICAR/o8 094942 Nanomedicine - Principles and applications ING- IND/23 099300 Soft matter: the structure and rheology of complex fluids FIS/o3	1x5
	099278 Biomachines (with laboratory) ING-IND/34 099277 Computational biology of the heart ING-IND/34	1x5	099278 Biomachines (with laboratory) ING-IND/34 099277 Computational biology of the heart ING-IND/34	1x5
third year – I semester	091584 Advanced materials ING-IND/22	10	091584 Advanced materials ING-IND/22	10
	083042 Bioingegneria cellulare ING-IND/34 099279 Technologies for regenerative medicine ING-IND/34 096253 Fenomeni di trasporto nei sistemi biologici ING- IND/34 083122 Progettazione di endoprotesi [C.I.] ING-IND/34 099281 - Advanced modeling approaches for cardiovascular surgery [I.C.] ING-IND/34	1x10	083042 Bioingegneria cellulare ING-IND/34 099279 Technologies for regenerative medicine ING-IND/34 096253 Fenomeni di trasporto nei sistemi biologici ING- IND/34 083122 Progettazione di endoprotesi [C.I.] ING-IND/34 099281 - Advanced modeling approaches for cardiovascular surgery [I.C.] ING-IND/34	1x10
	098454 Strutture bioartificiali e biomimetiche ING-IND/34 096236 Mechanics of biological structures ING-IND/34	1x5	098454 Strutture bioartificiali e biomimetiche ING-IND/34 096236 Mechanics of biological structures ING-IND/34	1x5
	054302 Biomaterials and instrumental analysis laboratory ING- IND/34 052379 Laboratorio di caratterizzazione dei tessuti ING-IND/34 052376 Laboratorio di biofluidodinamica ING-IND/34 052375 Computational biomechanics laboratory ING-IND/34	1x5	054302 Biomaterials and instrumental analysis laboratory ING-IND/34 052379 Laboratorio di caratterizzazione dei tessuti ING- IND/34 052376 Laboratorio di biofluidodinamica ING-IND/34 052375 Computational biomechanics laboratory ING-IND/34	1x5
third year – II semester	085836 Applicazioni biotecnologiche e bioreattori [C.I.] ING- IND/34 083047 Biomateriali [C.I.] ING-IND/34 054297 Life support systems ING-IND/34	1x10	085836 Applicazioni biotecnologiche e bioreattori [C.I.] ING- IND/34 083047 Biomateriali [C.I.] ING-IND/34 054297 Life support systems ING-IND/34	1x10
	Multidisciplinary thesis work	20	Multidisciplinary thesis work	20