

**PAA 7** **MODELLISTICA MATEMATICO-FISICA PER APPLICAZIONI NUCLEARI**  
**NUC** **(Mathematical and physical modeling for nuclear applications)**

	n.	CAT	SEM	SSD	COD	INSEGNAMENTO / COURSE	CFU
ANNO YEAR 1	1	OB	1	MAT/05	095958	Real and functional analysis	8
	2	OB	1	ING-INF/05	052496	Algorithms and parallel computing	10
	3	ING	1	ING-IND/18	096044	Fission reactor physics	10
	4	MTM	2	MAT/05	095963	Advanced partial differential equations	8
	5	MA	2	MAT/08	052497	Numerical analysis for partial differential equations	10
	6	MA	2	MAT/08	095965	Advanced programming for scientific computing (10 CFU)	10
			2	MAT/07	097725	Mathematical and physical modeling in engineering (10 CFU)	
	7	SC	2	ING-IND/19	089543	Reliability, safety and risk analysis B (5 CFU)	5
2			FIS/03	089480	Solid state physics A (5 CFU)		
						<b>Tot</b>	<b>61</b>

	n.	CAT	SEM	SSD	COD	INSEGNAMENTO / COURSE	CFU
ANNO YEAR 2	8	MA	1	MAT/07+MAT/08	097634	Computational fluid dynamics	10
	9	ING	1	ICAR/01	095962	Fluids labs	10
	10	SC	1	FIS/03	097670	Plasma physics	8
	11	MTM	1 o 2			<i>a scelta dalla Tabella / to be chosen from Group MTM</i>	8
	12	MTM	1 o 2			<i>a scelta dalla Tabella / to be chosen from Group MTM</i>	8
	13	SC	2	ING-IND/19	089543	Reliability, safety and risk analysis B (5 CFU)	5
			2	FIS/03	089480	Solid state physics A (5 CFU)	
			1 o 2		086304	Prova finale / Final work	12
						<b>Tot</b>	<b>61</b>

TABELLE / GROUPS						
	SEM	SSD	COD	INSEGNAMENTO / COURSE	CFU	Note / Notes
<b>MTM</b>	1	MAT/05	095973	Discrete dynamical models	8	Activation in the a.y. 2018/19 and alternate years after
	1	MAT/05	052503	Game theory	8	
	1	MAT/07	097660	Methods and models for statistical mechanics	8	Activation in the a.y. 2017/18 and alternate years after
	1	MAT/06	095975	Stochastic differential equations	8	
	1	MAT/06	095966	Stochastic dynamical models	8	
	2	MAT/05	095963	Advanced partial differential equations	8	
	2	MAT/07	097661	Biomathematical modeling	8	
	2	MAT/05	097673	Calculus of variations	8	Activation in the a.y. 2017/18 and alternate years after
	2	MAT/08	096659	Computational modeling in electronics and biomathematics	8	
	2	MAT/03	093153	Geometria differenziale	8	Activation in the a.y. 2018/19 and alternate years after
2	MAT/09	095972	Optimization	8		