

# Master of Technology in Applied Computational Fluid Dynamics

## School of Mechanical Engineering

Programme Credit Structure	Credits
University Core Courses	39
Professional Core Courses	24
Professional Elective Courses	14
Open Elective Courses	03
<b>Total Graded Credit Requirement</b>	<b>80</b>

<b>University Core Courses</b>		<b>39</b>			
		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
MAENG501	Technical Report Writing	1	0	4	3
MASTS503	Qualitative and Quantitative Skills Practice I	3	0	0	3
MASTS504	Qualitative and Quantitative Skills Practice II	3	0	0	3
MASET697	Project Work	0	0	20	10
MACFD698	Internship I/ Dissertation I	0	0	20	10
MACFD699	Internship II/ Dissertation II	0	0	20	10
<b>Professional Core Courses</b>		<b>24</b>			
MACFD501	Advanced Fluid Dynamics	3	1	0	4
MACFD502	Advanced Heat and Mass Transfer	3	0	2	4
MACFD503	Numerical Methods for Partial Differential Equations	3	0	2	4
MACFD504	Machine Learning for Fluid Dynamics	3	0	2	4
MACFD505	Numerical Solution of the Navier-Stokes Equation	3	0	2	4
MACFD506	Turbulence Modeling	3	0	2	4
<b>Professional Elective Courses</b>		<b>14</b>			
MACFD601	Computational Aerodynamics	3	0	2	4
MACFD602	Multiphase Flows	3	0	2	4
MACFD603	Finite Element Analysis of Solids and Fluids	3	0	2	4
MACFD604	Experimental Methods for Fluid Flow	3	0	2	4
MACFD605	High Performance Computing	3	0	2	4
MACFD606	Scientific Computing	2	0	2	3
MACFD607	Modelling and Simulation of Energy Systems	3	0	0	3
MACFD608	Fluid Structure Interaction	3	0	0	3
MACFD609	Chemically reacting Flows	2	0	2	3

<b>Open Elective Courses</b>	<b>03</b>
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Engineering | Sciences | Humanities | Social Sciences | Liberal Arts | Economics | Finance | Management