

2024

Modules	Code	PGDip level	MEng level	Pre reading start	Lecture block week	Post block end	Block week presentation mode	Lect	
Compulsory Core Data Science modules presented by Industrial Engineering									
PGDip students take all 6 modules - MEng student take the last five modules									
Programming in R (Eng) (ProgR)	14191	774	n.a.	15-Jan-24	29-Jan-24	2-Feb-24	15-Mar-24	F2F & online	EV
Data Science (Eng) (DS)	14190	774	874	4-Mar-24	Fri 15-Mar-24	22-Mar-24	3-May-24	F2F & online	MG
<i>Pre-requisite: Programming 1st year university level or equivalent (enquire with the Data Sciences lecturer)</i>									
Applied Machine Learning (AML)	14022	774	874	8-Apr-24	22-Apr-24	26-Apr-24	7-Jun-24	F2F & online	AE
<i>Co-requisite: Data Sciences 774/874</i>									
Optimisation (Eng) (OPT)	14020	774	874	3-Jun-24	18-Jun-24	24-Jun-24	2-Aug-24	F2F & online	JG/PV
<i>Co-requisite: Data Sciences 774/874; AML 774/874</i>									
Data Analytics (Eng) (DA)	13856	774	874	22-Jul-24	5-Aug-24	12-Aug-24	20-Sep-24	F2F & online	AE/EB
<i>Co-requisite: Data Sciences 774/874; AML 774/874; Optimisation 774/874</i>									
Big Data Technologies	14189	774	874	26-Aug-24	9-Sep-24	13-Sep-24	25-Oct-24	F2F & online	JdT
<i>Co-requisite: Data Sciences 774/874; AML 774/874; Optimisation 774/874</i>									

Specialization modules									
MEng students choose one specialization module.									
Internet of Things (Emerging topics in Engineering) (IoT) Presented by Industrial Engineering	11758	n.a.	875	1-Jul-24	15-Jul-24	19-Jul-24	30-Aug-24	F2F & online	TB (Thinus)
Deep Learning (Industrial Engineering)**** (DL) Presented by Industrial Engineering	31496	n.a.	874	30-Sep-24	14-Oct-24	18-Oct-24	29-Nov-24	F2F & online	EB (Load Jan)
<i>Co-requisite: Data Sciences 874; AML 874</i>									
Robotics I* Robotics II* Presented by Mechanical & Mechatronic Eng. <i>Note: has pre-requisites</i>	13014	n.a.	814	See information on SUNLearn module	22-Feb-24 18-Apr-24	23-Feb-24 19-Apr-24	See information on SUNLearn module	F2F only	M&M
Advanced Dynamics I* Advanced Dynamics II* Presented by Mechanical & Mechatronic Eng. <i>Note: has pre-requisites</i>	62960	n.a.	814	See information on SUNLearn module	29 Feb-24 2-May-24	1-Mar-24 3-May-24	See information on SUNLearn module	F2F only	M&M

Elective and Generic modules									
Postgraduate Diploma students participate in the two generic modules : Project Management 713 and Industrial Management 744.									
MEng students choose two of the modules listed below.									
Advanced Topics in Engineering Management (ATEM) / Industrial Management (IM) Presented by Industrial Engineering	11748 53937	744	873	5-Feb-24	19-Feb-24	23-Feb-24	5-Apr-24	F2F & online	CP/SG
Numerical Methods I** Numerical Methods II** Presented by Div. of Applied Mathematics	36323		876	See information on SUNLearn module	27-Mar-24 29-Apr-24	28-Mar-24 30-Apr-24	See information on SUNLearn module	F2F & online	Prof Hale nickhale@sun.ac.za
Project Management (PM) (Industrial Engineering) Presented by Industrial Engineering	51993	713	873	20-May-24	3-Jun-24	7-Jun-24	19-Jul-24	F2F & online	TB
Project Economics and Finance*** Presented by Dep. Civil Engineering	58157		812	Pre-reading posted on SUNLearn	20-May-24	24-May-24	See information on SUNLearn module	Hybrid / Post Graduate venue	Mr C Jurgens cj@sun.ac.za

Additional Compulsory Module									
Professional Communication	59447	771	871		Module opens end of February	Selfstudy module with deadline 5 April 2024		online selfpaced	MF/AB

Note: 7xx modules are taught on PGDip level. 8xx modules are taught on MEng level.

* This module is offered by the Dep. of Mechanical&Mechatronic Engineering. Enquire details on pre-requisites/presentation mode/module structure/confirmation of presentation dates here: <https://www.mecheng.sun.ac.za/postgraduate-programmes/prospective-postgraduate/>
Regarding fulfillment of pre-requisites contact mfrei@sun.ac.za if you want to choose these modules.

** This module is offered by the Applied Maths Department. Enquire details on <https://appliedmaths.sun.ac.za/Postgrad/>

*** This module is offered by the Dept. of Civil Engineering. Enquire details on presentation mode/module structure here: <https://civeng.sun.ac.za/current-postgraduates/>

****Marks for this module will only be loaded at the beginning of the following year, i.e. they will not be available for a December graduation of the current year.

Anchor modules and research assignment module									
Research assignment (Industrial Engineering) 60 credits	10881		876		See submission date in SUNLearn module	See submission date in SUNLearn module			AE/ supervisors
Pre-requisite: 5 core modules passed.									