

2025 TIMETABLE

| Modules | Code | PGDip level | MEng level | Pre reading start | Lecture block days | Post block end | Block week presentation mode | Lecturer |
|--|----------------|--------------------------|--------------------------|------------------------------------|--|------------------------------------|------------------------------|---|
| Compulsory Core Data Science modules 2025 Data Sciences PGDip students take 6 modules: DS, AML, OPT, DA, BDT, ADL - Data Sciences MEng students take 5 modules: DS, AML, OPT, DA, BDT continuing PGDip students need Prog R, DS, AML, OPT, DA, BDT to graduate and can register for ADL as additional module | | | | | | | | |
| Programming in R (Eng) <i>Presented by Industrial Engineering</i> <i>Only offered for PGDip students who need to repeat the module !! Note you must be fully registered before the pre-reading.</i> | 14191 | 774 | | 20 Jan 25 | 3 Feb to 7 Feb 25 | 20 Mar 25 | selfstudy | Dr E Vermeulen / euodia@sun.ac.za |
| Data Science (Eng) (DS) <i>Presented by Industrial Engineering</i> <i>Pre-requisite: Programming at 1st year university level or equivalent (students outside the DS programmes to confirm with the Data Sciences lecturer)</i> | 14190 | 774 | 874 | 24 Feb 25 | 10 Mar to 14 Mar 25 | 25 Apr 25 | F2F & online | Prof M Gwetu mgwetu@sun.ac.za |
| Applied Machine Learning (AML) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874</i> | 14022 | 774 | 874 | 17 Mar 25 | 31 Mar + 1 Apr 25 14 Apr + 15 Apr 25 29 Apr 25 | 11 May 25 | online | Prof AP-Englebrecht engel@sun.ac.za |
| Optimisation (Eng) (OPT) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874; AML 774/874</i> | 14020 | 774 | 874 | 19 May 25 | 2 Jun + 3 Jun 25 17 Jun + 18 Jun 25 30 Jun 25 | 13 Jul 25 | online | Prof J Grobler jacminiegrobler@sun.ac.za / Dr P Venter philipzventer@sun.ac.za |
| Data Analytics (Eng) (DA) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874; AML 774/874; Optimisation 774/874</i> | 13856 | 774 | 874 | 21 Jul 25 | Tue 5 Aug + Wed 6 Aug 25 Tue 19 Aug + Wed 20 Aug 25 Wed 27 Aug 25 | 14 Sep 25 | online | Dr E Vermeulen / euodia@sun.ac.za |
| Big Data Technologies (BDT) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874; AML 774/874;</i> | 14189 | 774 | 874 | 18 Aug 25 | Tue 2 Sep + Wed 3 Sep 25 15 Sep + 16 Sep 25 29 Sep 25 | 12 Oct 25 | F2F* / online | Dr J Du Toit jacques@spatiale.dge.ai |
| Applied Deep Learning (ADL) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874; AML 774/874; Optimisation 774/874</i> | 14900 | 774 | see section spec modules | 8 Sep 25 | 22 Sep + 23 Sep 25 6 Oct + 7 Oct 25 20 Oct 25 | 2 Nov 25 | F2F* / online | Mr E Burger eldonburger@sun.ac.za |
| Specialization modules Data Sciences MEng students choose one specialization module. | | | | | | | | |
| Internet of Things (IoT) <i>Presented by Industrial Engineering</i> <i>Co-requisite: n.a.</i> | 14771 | n.a. | 874 | 30 Jun 25 | Fri 11 Jul to Thu 17 Jul 25 | 29 Aug 25 | online | Prof Thinus Booysen mibooyesen@sun.ac.za |
| Applied Deep Learning (ADL) <i>Presented by Industrial Engineering</i> <i>Co-requisite: Data Sciences 774/874; AML 774/874; Optimisation 774/874</i> | 14901 | see section core modules | 874 | 8 Sep 25 | 22 Sep + 23 Sep 25 6 Oct + 7 Oct 25 20 Oct 25 | 2 Nov 25 | F2F* / online | Mr E Burger eldonburger@sun.ac.za |
| Robotics I**** Robotics II**** <i>Presented by Mechanical & Mechatronic Eng.</i> <i>Note:pre-requisites! contact mfrei@sun.ac.za</i> | 13014 | n.a. | 814 | See information on SUNLearn module | 19 Feb + 20 Feb 25 3 Apr + 4 Apr 25 | See information on SUNLearn module | F2F only | M&M dept. |
| Advanced Dynamics I**** Advanced Dynamics II**** <i>Presented by Mechanical & Mechatronic Eng.</i> <i>Note:pre-requisites! contact mfrei@sun.ac.za</i> | 62960 | n.a. | 814 | See information on SUNLearn module | 27 Mar + 28 Mar 25 29 Apr + 30 Apr 25 | See information on SUNLearn module | F2F only | M&M dept. |
| Elective and Generic modules Data Sciences PGDip students take the two generic modules : Project Management 713 and Industrial Management 744. Data Sciences MEng students choose two of the modules listed below. | | | | | | | | |
| Advanced Topics in Engineering Management (ATEM) / Industrial Management (IM) <i>Presented by Industrial Engineering</i> | 11748 53937 | 744 | 873 | 10 Feb 25 | 24 Feb to 28 Feb 25 | 11 Apr 25 | F2F & online | Prof S Grobbelaar sgrobbelaar@sun.ac.za / Prof C Pieterus calliepietorius@sun.ac.za |
| Numerical Methods I** Numerical Methods II** <i>Presented by Div. of Applied Mathematics</i> | 36323 | | 876 | See information on SUNLearn module | 19 Mar + 20 Mar 25 16 Apr + 17 Apr 25 | See information on SUNLearn module | F2F & online | Prof Hale richhale@sun.ac.za |
| Project Management (PM) <i>Presented by Industrial Engineering</i> | 51993 | 713 | 873 | 26 May 25 | 9 Jun to 13 Jun 25 | 25 Jul 25 | F2F & online | Prof T Barnard tarynbarnard@sun.ac.za |
| Project Economics and Finance*** <i>Presented by Dep. Civil Engineering</i> | 58157 | | 812 | Pre-reading posted on SUNLearn | 5 May to 9 May 25 | See information on SUNLearn | F2F & online | Mr C Jurgens cj@sun.ac.za |
| Additional Compulsory Module | | | | | | | | |
| Professional Communication | 59447 | 771 | 871 | Module opens end of February | Selfstudy module on SUNLEARN with deadline 11 April 2025 | | online selfpaced | Dr M Frei mfrei@sun.ac.za / Ms A Buchholz |
| MEng struc: Research assignment module | | | | | | | | |
| Research assignment (Industrial Engineering) 60 credits | 10881 | | 876 | | The submission dates are listed on the SUNLearn module | | | Prof AP-Englebrecht engel@sun.ac.za & supervisors |

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

* Check on the respective SUNLearn module if this module is offered F2F or synchronous online only

** 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/>

**** 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/> In 2025 Adv Dyn cannot be taken in the same year as AML 874.

Regarding fulfillment of pre-requisites contact mfrei@sun.ac.za **BEFORE** registering for the modules if you want to choose these modules.