

2016 HANDBOOK MARITIME STUDIES



HANDBOOK FOR 2016

FACULTY OF APPLIED SCIENCES

DEPARTMENT of MARITIME STUDIES

IMPORTANT NOTICES

- Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the institution and, if permitted, will be in accordance with the rules applicable at that time.
- The rules in this departmental handbook must be read in conjunction with the General Rules (G Rules) contained in the DUT General Handbook for Students as well as the relevant Study Guides.
- With respect to an appeal, your attention is specifically drawn to Rules G1(8) and (9), and to the process of dealing with students issues.

STRATEGIC DIRECTION (2015-2019) FACULTY OF APPLIED SCIENCES

[Educate. Engage. Innovate.]

VISION

Leading innovation through science and technology

MISSION STATEMENT

Educate students Generate new scientific knowledge Engage communities

VALUES

- I. Accountability: We take ownership of all activities, resources and tasks required of us. We deliver on our promises and responsibilities.
- 2. Integrity: We adhere to moral standards and principles. We are transparent and consistent in all our actions, and lead by example.
- **3.** Dedication: We are committed to achieving our goals and expectations.
- **4.** Professionalism: We operate within clear boundaries with respect to our code of conduct.
- **5.** People Oriented: We are committed to sustaining the morale and holistic development of staff and student. We value diversity in all forms.

DEPARTMENT OF MARITIME STUDIES VISION

To be at the forefront of maritime education and training in South Africa

MISSION STATEMENT

EDUCATE through student centeredness, general education and the attainment of graduate attributes

DEVELOP Post graduate qualifications to meet the demands of South Africa's Blue Economy

ENGAGE with maritime communities; nationally and internationally

CONTENTS

			Page
١.		MENTAL & FACULTY CONTACT DETAILS	I
2.		MENTAL STAFF	2
3.		CATIONS OFFERED BY THE DEPARTMENT	3
4.	DIPLOM	A: NAUTICAL STUDIES	
4 . I	Program	me Structure	4
4.2	Program	me Information	5
	4.2.1	Academic Integrity	5
	4.2.2	Code of Conduct for Students	5
	4.2.3	Attendance	5
	4.2.4	Work Integrated Learning (WIL)	5
	4.2.5	Assessment and Moderation	5
	4.2.6	Employment Opportunities	6
	4.2.7	SAMSA Eyesight Requirement	6
4.3	Program	me Rules	6
	4.3.1	Minimum Admission Requirements	6
	4.3.2	Selection Criteria	7
	4.3.3	Pass Requirements	7
	4.3.4	Re-registration Rules	7
	4.3.5	Exclusion Rules	8
	4.3.6	Interruption of Studies	8
	4.3.7	Code of Conduct	8
	4.3.8	Attendance and Assessment	8
	4.3.9	Health and Safety	9
	4.3.10	General Education	9
_	D.IDI 014		
5.		A: SHIPPING AND LOGISTICS	
		me Structure	10
5.2	•	me Information	10
	5.2.1	Academic Integrity	11
	5.2.2	Code of Conduct for Students	- 11
	5.2.3	Attendance	11
	5.2.4	Work Integrated Learning (WIL)	Ш
	5.2.5	Assessment and Moderation	11
	5.2.6	Employment Opportunities	12
5.3	•	me Rules	12
	5.3.1	Minimum Admission Requirements	12
	5.3.2	Selection Criteria	13
	5.3.3	Pass Requirements	13
	5.3.4	Re-registration Rules	13
	5.3.5	Exclusion Rules	14
	5.3.6	Interruption of Studies	14
	5.3.7	Work Integrated Learning Rules	14
	538	Code of Conduct	14

	5.3.9 5.3.10 5.3.11	Attendance and Assessment	15 15 15
6.		IAL DIPLOMA:	13
0.		1E STUDIES (NAVIGATION) (NDMTS1)	16
6.1		me Structure	16
6.2	Programi	me Information	16
	6.2.1	Academic Integrity	16
	6.2.2	Code of Conduct for Students	17
	6.2.3	Attendance	17
	6.2.4	Work Integrated Learning (WIL)	17
	6.2.5	Assessment and Moderation	17
	6.2.6	Employment Opportunities	18
	6.2.7	SAMSA Eyesight Requirement	18
	6.2.8	Requirements for Chief Mate COC	18
6.3	Programi	me Rules	18
	6.3.1	Minimum Admission Requirements	18
	6.3.2	Selection Criteria	19
	6.3.3	Pass Requirements	19
	6.3.4	Re-registration Rules	19
	6.3.5	Exclusion Rules	20
	6.3.6	Interruption of Studies	20
	6.3.7	Work Integrated Learning Rules	20
	6.3.8	Code of Conduct	20
	6.3.9	Attendance and Assessment	21
7.		IAL DIPLOMA: MARITIME STUDIES (NAVIGATION) (EX-	
		CURRICULUM) (NDMSFI)	21
		me Structure	22
		me Information	22
7.3	_	me Rules	23
	7.3.I	Minimum Admission Requirements	23
	7.3.2	Selection Criteria	23
	7.3.3	Pass Requirements	23
	7.3.4	Re-registration Rules	23
	7.3.5	Exclusion Rules	23
	7.3.6	Interruption of Studies	23
	7.3.7	Work Integrated Learning Rules	23
	7.3.8	Code of Conduct	23
	7.3.9	Attendance and Assessment	23
	7.3.10	Health and Safety	23
8.		IAL DIPLOMA: MARITIME STUDIES	
٠.	(SHORE	BASED) (NDMTSI)	24
8. I	Programi	me Structure	24

8.2	Programi	me Information	24
	8.2.1	Academic Integrity	24
	8.2.2	Code of Conduct for Students	24
	8.2.3	Attendance	25
	8.2.4	Work Integrated Learning (WIL)	25
	8.2.5	Assessment and Moderation	26
	8.2.6	Employment Opportunities	26
8.3	Programi	me Rules	26
	8.3.1	Minimum Admission Requirements	26
	8.3.2	Selection Criteria	26
	8.3.3	Pass Requirements	26
	8.3.4	Re-registration Rules	27
	8.3.5	Exclusion Rules	27
	8.3.6	Interruption of Studies	27
	8.3.7	Work Integrated Learning Rules	27
	8.3.8	Code of Conduct	27
	8.3.9	Attendance and Assessment	28
	8.3.10	Health and Safety	28
9.	SERVICI	NG	29
9.1		Subjects	29
9.2		Qualifications	30
	9.2.1	National Diploma: Mechanical Engineering	30
		(Marine) (NDMCH2)	
	9.2.2	Marine Éngineering	32
		Non Diploma (NODIPM)	
10.	SHORT	COURSES	32
11.	CI IDIE	CT CONTENT	32
11.	зовјес П.Т	Diploma in Nautical Studies	33
	11.1	Diploma in Shipping and Logistics	34
	11.2	General Education Module	35
	11.3	National Diploma: Maritime Studies	37
	11.5	Marine Engineering (Electives and Non-Diploma)	45
		. Id. iiie Engineering (Electrics and Pron-Diploma)	.5

I. DEPARTMENTAL & FACULTY CONTACT DETAILS

All departmental queries to:

Secretary: Mrs Arshna Ramouthar

 Tel No:
 031 373 2144

 Fax:
 031 373 2137

 Email:
 arshnar@dut.ac.za

Location of Department: Steve Biko Campus, S6 Level 5

All Faculty queries to:

Faculty Officer: Ms G Shackleford
General Enquiries No: 031 373 2506
Facsimile No: 031 373 2175
Email: dutfas@dut.ac.za

Location: Block S4 Level 3, Steve Biko Campus

Faculty Assistant: Ms J Nagan
General Enquiries No: 031 373 2717
Facsimile No: 031 373 2175
Email: jessican@dut.ac.za

Location: Block S4 Level 3, Steve Biko Campus

Executive Dean: Prof S Singh Executive Dean's Secretary: Vacant Telephone No: 03 | 373 2720 Facsimile No: 03 | 373 2724 Email: dutfas@dut.ac.za

Location: Between Block S6 and S7, Level 4, Steve

Biko Campus

2. **DEPARTMENTAL STAFF**

Head of Department Mr L Govender, NHD Maritime Studies, Chief Mate CoC,

BTech (Management); MSc Shipping Operations (SSU)

Lecturers

Mr NM Manqele, B MilSc (Stellenbosch), BSc Hons (UNISA), MSc Environmental Sciences (UKZN)

Captain C Johnsen, Master Mariner, PG Dip Maritime Law

(UKZN)

Mr P Gadagkar, Extra First Class Chief Marine Engineer, Diploma in Marine Surveying (Lloyds Maritime Academy)

Miss MM Gounder, MICS, MCILT, MCom Maritime Studies

(UKZN)

Secretary Ms A Ramouthar, BT: Commercial Administration (DIT);

NC: Hotel Reception (MLS)

3. QUALIFICATIONS OFFERED BY THE DEPARTMENT

Programmes are offered in this Department which will, upon successful completion, lead to the award of the following qualifications:

Diploma

Qualifications	Qual Code	Important Dates	SAQA NLRD ID
Dip: Nautical Studies		1st Offered Jan 2016	
Dip: Shipping and Logistics		1st Offered Jan 2016	

National Diploma (ND)

Qualifications	Qual	Important	SAQA
	Code	Dates	NLRD
			ID
ND: Maritime Studies (Navigation)	NDMTSI		72250
ND: (ECP) Maritime Studies	NDMSFI	Ist offered	72250
(Navigation)		Jan 2013	
ND: Maritime Studies	NDMTSI		72250
(Shore-based)			

The ND: Maritime Studies comprises both navigation (sea-going) and shore-based programmes.

In addition to the above qualification:

- Students may register for a ND: Mechanical Engineering Diploma with the elective marine engineering subjects.
- Marine Engineering is offered as a Non-Diploma programme.

The present ND: Maritime Studies Navigation and Shore-based programmes will be phased out at the end of 2019.

4. DIPLOMA: NAUTICAL STUDIES

Purpose of Qualification

The Diploma in Nautical Studies represents a level of qualification that recognises the ability to gain and apply a range of focused, specialised knowledge, skills and understanding. Graduates of the diploma would be able to display competence in the application of knowledge in a broad range of varied work activities associated with an international career at sea.

4.1. PROGRAMME STRUCTURE

Code	Modules	Core Fundamental	Assess -	Semester Of Study	HEMIS Credits	Pre-requisite Modules
		Elective	ment			
MRNM101	Marine Mathematics I	F	CA	SI	0.100	
MRSN101	Marine Science I	F F	EX	SI	0.100	
CSIL101	Computer Skills and Information Literacy		CA	SI	0.100	
CMSS101	Communication Skills	F	CA	SI	0.100	
CSTN101	IGE: DUT Cornerstone 101	F	CA	SI	0.100	
MRNM201	Marine Mathematics 2	F	CA	S2	0.100	Marine Mathematics I
MRSN201	Marine Science 2	F	EX	S2	0.067	Marine Science I
ISOP101	Introduction to Shipboard Operations	F	CA	S2	0.100	
NENS101	Navigation – Electronic Navigation Systems I	С	CA	S2	0.067	
LDSH101	IGE: Leadership	E	CA	S2	0.067	
VWKPI0I	IGE: Values in the Workplace	E	CA	S2	0.067	
VNVL101	IGE: Violence and Non- Violence	E	CA	S2	0.067	
APSS101	FGE: Applied Sciences and Society	E	CA	S2	0.100	
NMEN101	Navigation – Meteorology and Environment Management I	С	EX	\$3	0.100	Marine Science 2
NENS201	Navigation – Electronic Navigation Systems 2	С	CA	S3	0.100	
SHPM101	Shipboard Management I	С	EX	S3	0.133	Introduction to Shipboard Operations
SSCN101	Ship Stability and Construction	F	EX	\$3	0.100	Marine Mathematics Marine Science
GENVI0I	IGE: The Global Environment	E	CA	S3	0.067	
NMEN201	Navigation – Meteorology and Environment Management 2	O	EX	S4	0.100	Navigation – Meteorology and Environment Management I
NENS301	Navigation – Electronic Navigation Systems 3	С	EX	S4	0.100	Navigation – Electronic Navigation Systems 2
SHPM201	Shipboard Management 2	С	EX	S4	0.100	Shipboard Management I
SSCN201	Ship Stability and Construction 2	U	EX	S4	0.100	Ship Stability and Construction I
ASWL101	FGE: Applied Science and Wellness	F	CA	S4	0.100	
TENEI0I	IGE: The Entrepreneurial Edge	E	CA	S5	0.067	
NVCLI01	Navigation – Calculations I	С	EX	S5	0.100	Marine Mathematics 2
NOCN101	Navigation – Ocean and Coastal Navigation I	С	EX	S5	0.167	Marine Mathematics 2
SHPM301	Shipboard Management 3	С	EX	\$5	0.100	Shipboard Management 2
SSCN301	Ship Stability and Construction 3	С	EX	S5	0.100	Ship Stability and Construction 2
EQDVI0I	IGE: Equality and Diversity	E	CA	S5	0.067	
HCDK101	IGE: HIV and Communicable Diseases in KZN	E	CA	S5	0.067	
NVCL201	Navigation – Calculations 2	С	EX	S6	0.067	Navigation - Calculations I
NOCN201	Navigation - Ocean and Coastal 2	С	EX	\$6	0.100	Navigation - Ocean and Coastal Navigation I
NSMR101	Navigation – Simulation (Radar and ARPA)	С	CA	S6	0.067	Navigation – Electronic Navigation Systems 3
NSME101	Navigation – Simulation (ECDIS)	С	CA	S6	0.100	Navigation – Electronic Navigation Systems 3
MESY101	Marine Engineering Systems	С	EX	S6	0.100	Marine Science 2
ASES 101	FGE: Applied Sciences for Environment Sustainability	E	CA	S6		
ASCE101	FGE: Applied Sciences and Community Engagement	E	CA	S6		

4.2. PROGRAMME INFORMATION

This information must be read in conjunction with the programme rules that follow.

4.2.1 Academic Integrity

Refer to the DUT General Rules pertaining to academic integrity G13 (I) (o) – covering falsification of academic records, plagiarism and cheating. These will be enforced wherever necessary to safeguard the worthiness of our qualifications and the integrity of the Faculty of Applied Sciences at DUT.

4.2.2 Code of Conduct for Students

A professional code of conduct pertaining to behaviour, appearance, personal hygiene and dress shall apply to all students registered with the Faculty of Applied Sciences, at all times. Refer to Programme Rule 4.3.8 below.

4.2.3 Attendance

Students are expected to achieve 100% attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Students are expected to be punctual for all academic activities. Penalties may be invoked for late attendance. Refer to Programme Rule 4.3.9 below.

4.2.4 Assessment and Moderation

Students are expected to work steadily through the period of registration in order to achieve the highest results possible.

Assessment details are listed under each subject at the back of this handbook.

Assessments could include a variety of testing methods including, but not limited to, written tests, oral tests, theoretical and/or practical examinations, group work and assignments.

Assignments must be handed personally to the lecturer who will record their receipt. Late submission will be penalised.

In the case of a continuous assessment subject (a subject which has no final examination/s or supplementary examination/s) opportunities for reassessment are provided for students who fail assessments. These are stipulated in the relevant study guide.

Moderation follows the DUT Assessment Policy stipulations.

Refer to Programme Rule 4.3.9 below.

4.2.5 Employment Opportunities: Sea-going

The first line of employment may lie within a shipping company or with Transnet National Ports Authority (TNPA), where the graduate will enter the industry as a Deck Cadet, and on completion of the requisite sea-time, further study/training and ancillary courses, could one day aspire to the command of an ocean-going vessel or work in a number of divisions within TNPA (including tugs, pilotage, dredging and vessel traffic services).

Opportunities also exist with the South African Navy (SAN). However the student will need to meet the stringent physical and medical requirements of SAN.

A graduate with the Dip: Nautical Studies with sea-going experience can transit ashore into a number of positions in areas such as surveying; technical management; education, training and development; and crewing management.

4.2.6 SAMSA Eyesight Requirement

Students taking the sea-going option must, on registration, provide the Department with the result of a SAMSA (South African Maritime Safety Authority) eye test from a SAMSA-approved medical practitioner. The SAMSA office is situated on 17th floor of Durban Bay House, 333 Anton Lembede (formerly Smith) Street, Durban (Tel: 031 307 1501). A SAMSA regional office may also be consulted. Failure in this assessment will mean that a seagoing career will not be possible.

4.3 PROGRAMME RULES

4.3.1 Minimum Admission Requirements

In addition to DUT Rule G7, the following minimum entrance requirements and the selection criteria outlined in 4.3.2 apply for applicants with reference to:-

4.3.1.1 Academic Achievement

In line with the above, applicants' school leaving academic achievement must comply with one of the following:-

i) a National Senior Certificate (NSC) with endorsement for diploma/degree entry with the following subjects at the stated minimum ratings

Compulsory Subject	NSC Rating
English	4
Mathematics	4
Physical Science	4

ii) A Senior Certificate is matriculation exemption with the following subjects at the stated minimum ratings

Compulsory Subject	HG	SG
English	E	D
Mathematics	E	D
Physical Science	E	D

iii) a National Certificate (Vocational) Level 4 with statutory requirements for a diploma entrance and the following subjects at the stated minimum ratings

Compulsory Subject	Minimum
English	60%
Mathematics	60%
Physical Science (or recognised equivalent)	60%

4.3.1.2 Admission Requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT Rules G7(3), and G7(8) respectively, will apply.

4.3.1.3 Admission of International Students

- The DUT's Admissions Policy for International Students and DUT Rules G4 and G7(5) will apply.
- International students must meet the equivalent of programme minimum entrance requirements as stated above.
- An International applicant will be accepted onto the ND: Maritime Studies (Navigation) only if sponsored by a company.
- An applicant with South African Refugee Status will not be accepted into the ND: Maritime Studies (Navigation) due to the inability to acquire international travel visas.

4.3.1.4 Admission of Students from other Institutions

In addition to the relevant DUT Rules a transferring student will only be accepted if there are places available and the student has met the applicable entrance requirements of the university.

4.3.2 Selection Criteria

- **4.3.2.1** In addition to the Minimum Admission Requirements (Rule 4.3.1), the following selection process will determine placement in the programme:
 - All applicants must apply through the Central Applications Office (CAO).
 - Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 11 or Grade 12 trial marks will be used for current matriculants).
 - Applicant must achieve a minimum score of 270 points. The calculation of the points excludes Life Orientation.

4.3.3. Pass Requirements

In addition to the DUT Rules G12, G14 and G15, the following programme rules apply: 4.3.3.1 As per SAMSA safety specifications, a final mark of not lower than 60% is required for a pass in the following subjects:

- Ship Stability and Construction 1, 2 and 3
- Navigation Calculations I and 2
- Navigation Ocean and Coastal Navigation 1 and 2

4.3.4. Reregistration Rules

In addition to the DUT Rule G16, and all prerequisite modules as identified in the Learning Table Structure (4.1), the following programme rules apply:-

- **4.3.4.1** Promotion from Semester 1 to Semester 2: Students must pass a minimum of 3 modules
- **4.3.4.2** Promotion from Semester 2 to Semester 3: Students must pass a minimum of 3 modules
- **4.3.4.3** Promotion from Semester 3 to Semester 4: Students must pass a minimum of 3 modules

- **4.3.4.4** Promotion from Semester 4 to Semester 5: Students must pass a minimum of 3 modules
- **4.3.4.5** Promotion from Semester 5 to Semester 6: Students must pass a minimum of 3 modules

4.3.5 Exclusion Rules

In addition to DUT Rule G17, a first semester student who fails three or more modules with a final result of less than 40% in each module is not permitted to reregister in this programme. Deregistration from any modules is subject to the provision of DUT Rule G6.

4.3.6. Interruption of Studies

In accordance with Rule G21A(b), the minimum duration for this programme will be 3 years of registered study and the maximum duration will be 5 years of registered study. Should a student interrupt their studies by more than one (1) year, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

4.3.7. Code of Conduct

In addition to the Student Code of Conduct in the DUT General Handbook for Students, and the relevant requirements as stated in the appropriate Study Guides, the following rules apply:

4.3.7.1 Conduct of Students in Practical Facilities

Strict adherence to instructions issued by technical, supervisory or academic staff is required due to the need to ensure effective and safe practice in these facilities. Misconduct or disregard for instructions will be referred to the relevant disciplinary procedure.

4.3.7.2 Uniforms

Students must adhere to instructions issued by technical, supervisory or academic staff regarding the specific dress code required during practicals. Non-compliance will result in the student being denied access to the venue.

4.3.8. Attendance and Assessment

- **4.3.8.1** A student who, for any valid reason(Refer to Programme Rule 4.3.8.2 below), is absent from a particular practical or test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days of returning to the institution in order to be considered for a special assessment.
- **4.3.8.2** The DUT Rule G13(3)(a) which refers to special examinations also refers to special assessments set within departments for students who have missed coursework assessments. In these cases the department will determine the validity of the student's reason for not taking the assessment, and the nature of the special assessment.

4.3.9. Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT. Failure to do so will be treated as a breach of discipline. Refer to the appropriate Health and Safety policies.

4.3.10. General Education

Students must complete the university's General Education Requirement. This includes following:

- DUT Cornerstone 101 and three 8 credit institutional modules
- Three 12 credit Faculty of Applied Sciences modules

5. DIPLOMA: SHIPPING AND LOGISTICS

Purpose of the Qualification

The Diploma: Shipping and Logistics represents a level of qualification that recognises the ability to gain and apply a range of focused, specialised knowledge, skills and understanding. Graduates of the diploma would be able to display competence in the application of knowledge in a broad range of varied work activities associated with a career in shipping and logistics.

5.1 PROGRAMME STRUCTURE

Code	Modules	Core Fundamen- tal Elective	As- sess- ment	Semester of Study	HEMIS Credits	Pre-requisite Modules
ECNC101	Economics (Micro)	F	EX	SI	0.100	
ISTS101	Introduction to Statistics	F	CA	SI	0.100	
CSIL101	Computer Skills and Information Literacy	F	CA	SI	0.100	
CMSS101	Communication Skills	F	CA	SI	0.100	
CSTN101	IGE: DUT Cornerstone 101	F	CA	SI	0.100	
ECNS201	Economics (Macro)	F	EX	S2	0.100	Economics (Micro)
STSC101	Statistics I	F	EX	S2	0.100	Introduction to Statistics
ISHP101	Introduction to Shipping	С	CA	S2	0.133	
CLHR101	IGE: Constitutional Law and Human Rights	E	CA	S2	0.067	
CLDVI0I	IGE: Cultural Diversity	E	CA	S2	0.067	
VNVLI01	IGE: Violence and Non-Violence	E	CA	S2	0.067	
IASC101	FGE: Introduction to Applied Sciences	F	CA	S2	0.100	
SHLP101	Shipping and Legal Practice I	С	EX	S3	0.067	Introduction to Shipping
LGTS101	Logistics I	C	EX	S3	0.100	
BSMT101	Business and Management I	С	EX	S3	0.100	
PTMN101	Port and Terminal Management I	С	EX	S3	0.100	
LDSH101	IGE: Leadership	E	CA	S3	0.067	
VWKPI0I	IGE: Values in the Workplace	E	CA	S3	0.067	
SHLP201	Shipping and Legal Practice 2	С	EX	S4	0.100	Shipping and Legal Practice I
LGTS201	Logistics 2	С	EX	S4	0.100	Logistics I
BSMT201	Business and Management 2	С	EX	S4	0.100	Business and Manage- ment I
PTMN201	Port and Terminal Management 2	С	EX	S4	0.100	Port and Terminal Management I
ASWL101	FGE: Applied Science and Wellness	F	CA	S4	0.100	
SHLP301	Shipping and Legal Practice 3	С	EX	S5	0.100	Shipping and Legal Practice 2
LGTS301	Logistics 3	С	EX	S5	0.100	Logistics 2
BSMT301	Business and Management 3	С	EX	S5	0.067	Business and Manage- ment 2
PTMN301	Port and Terminal Management 3	С	EX	S5	0.067	Port and Terminal Management 2
	IGE: Equality and Diversity	E	CA	S5	0.067	
HCDK101	IGE: HIV and Communicable Diseases in KZN	Е	CA	S5	0.067	
TENEI0I	IGE: The Entrepreneurial Edge	E	CA	S5	0.067	
APSS101	FGE: Applied Sciences and Society	E	CA	S5	0.100	
ASES101	FGE: Applied Sciences for Environment Sustainability	Е	CA	S5	0.100	
ASCE101	FGE: Applied Sciences and Community Engagement	Е	CA	S5	0.100	
MSWP101	Maritime Shore-based Work Practice	С	CA	S6	0.500	All modules completed

5.2 PROGRAMME INFORMATION

This information must be read in conjunction with the programme rules that follow.

5.2.1 Academic Integrity

Refer to the DUT General Rules pertaining to academic integrity G13(1)(o) – covering falsification of academic records, plagiarism and cheating. These will be enforced wherever necessary to safeguard the worthiness of our qualifications, and the integrity of the Faculty of Applied Sciences at DUT.

5.2.2 Code of Conduct for Students

A professional code of conduct pertaining to behavior, appearance, personal hygiene and dress shall apply to all students registered with the Faculty of Applied Sciences, at all times. Refer to Programme Rule 5.3.8 below.

5.2.3 Attendance

Students are expected to achieve 100% attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Students are expected to be punctual for all academic activities. Penalties may be invoked for late attendance. Refer to Programme Rule 5.3.9 below.

5.2.4 Work Integrated Learning (WIL)

This programme requires the student/candidate to undergo a 6 month period of Work Integrated Learning (WIL) on completion of all modules in order to be awarded the qualification. All prescribed compulsory and elective modules (instructional offerings) and the prescribed WIL component must be completed in order to be awarded the qualification.

During the shore-based period the student is to complete a log book under the supervision of a training manager/supervisor who is obliged to submit quarterly reports to the Department, as well as a final report. These reports will form the evidence required to show completion of the experiential learning component.

The following subject comprises the experiential learning component of the programme for shore-based students:

Register Code	Subject
	Maritime Shore-based Work Practice

Refer to Programme Rule 5.3.11 below.

5.2.5 Assessment and Moderation

Students are expected to work steadily through the period of registration in order to achieve the highest results possible.

Assessment details are listed under each subject at the back of this handbook.

Assessments could include a variety of testing methods including, but not limited to, written tests, oral tests, theoretical or practical examinations, group work and assignments.

Assignments must be handed personally to the lecturer who will record their receipt. Late submission will be penalised.

In the case of a continuous assessment subject (a subject which has no final examinations or supplementary examinations) opportunities for reassessment are provided for students who fail assessments. These are stipulated in the relevant study guide.

Moderation follows the DUT Assessment Policy stipulations.

Refer to Programme Rule 5.3.9 below.

5.2.6 Employment Opportunities: Shore-based

A number of employment opportunities exist within the shore-based sector of the maritime industry. These include port agency, stevedoring, clearing and forwarding, surveying, warehousing, project management and terminal management.

5.3 PROGRAMME RULES

5.3.1 Minimum Admission Requirements

In addition to DUT Rule G7, the following minimum entrance requirements and the selection criteria outlined in 5.3.2 apply for applicants with reference to:-

5.3.1.1 Academic Achievement

In line with the above, applicants' school leaving academic achievement must comply with one of the following:-

i) a National Senior Certificate (NSC) with endorsement for diploma/degree entry with the following subjects at the stated minimum ratings

Compulsory Subject	NSC Rating
English	4
Mathematics	3
Business, Commerce or Management Subject	4

ii) a Senior Certificate is matriculation exemption with the following subjects at the stated minimum ratings

Compulsory Subject	HG	SG
English	E	D
Mathematics	Е	D
Business, Commerce or Management Subject	E	D

iii) a National (Vocational) Level 4 with statutory requirements for a diploma entrance and the following subjects at the stated minimum ratings.

Compulsory Subject	Minimum
English	60%
Mathematics	60%
Business, Commerce or Management Subject	60%

iv) a recognized Maritime or Shipping NQF 4 or above qualification from an accredited college; with a minimum of 60% in all subjects. In addition to this, the incumbent must possess a NSC, with the following subjects being passed:

Compulsory Subject	NSC Rating
English	4
Mathematics	3

5.3.1.2 Admission Requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT Rules G7(3), and G7(8) respectively, will apply.

5.3.1.3 Admission of International Students

- The DUT's Admissions Policy for International Students and DUT Rules G4 and G7(5) will apply.
- International students must meet the equivalent of programme minimum entrance requirements as stated above.

5.3.1.4 Admission of Students from other Institutions

In addition to the relevant DUT Rules a transferring student will only be accepted if there are places available and the student has met the applicable entrance requirements of the university.

5.3.2 Selection Criteria

- 5.3.2.1 In addition to the Minimum Admission
 - Requirements (Rule 5.3.1), the following selection process will determine placement in the programme:
 - All applicants must apply through the Central Applications Office (CAO).
 - Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 11 or Grade 12 trial marks will be used for current matriculants).
 - Applicant must achieve a minimum score of 270 points. The calculation of the points excludes Life Orientation.

5.3.3 Pass Requirements

The DUT Rules G12, G14 and G15 apply.

5.3.4. Reregistration Rules

In addition to the DUT Rule G16, and all prerequisite modules as identified in the Learning Table Structure (4.1), the following programme rules apply:-

5.3.4.1 Promotion from Semester I to Semester 2:

Students must pass a minimum of 3 modules

5.3.4.2 Promotion from Semester 2 to Semester 3:

Students must pass a minimum of 3 modules

5.3.4.3 Promotion from Semester 3 to Semester 4:

Students must pass a minimum of 3 modules

5.3.4.4 Promotion from Semester 4 to Semester 5:

Students must pass a minimum of 3 modules

5.3.4.5 Promotion from Semester 5 to Semester 6:

Pass all modules prior to WIL placement

5.3.5 Exclusion Rules

In addition to DUT Rule G17, a first year student who fails three or more modules with a final result of less than 40% in each module is not permitted to reregister in this programme. Deregistration from any module is subject to the provision of DUT Rule G6.

5.3.6. Interruption of Studies

In accordance with Rule G21A(b), the minimum duration for this programme will be one (1) years of registered study and the maximum duration will be 5 years of registered study, including any periods of WIL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

5.3.7. Code of Conduct

In addition to the Student Code of Conduct in the DUT General Handbook for Students, and the relevant requirements as stated in the appropriate Study Guides, the following rules apply:

5.3.7.1. Conduct of Students in Practical Facilities

Strict adherence to instructions issued by technical, supervisory or academic staff is required due to the need to ensure effective and safe practice in these facilities. Misconduct or disregard for instructions will be referred to the relevant disciplinary procedure.

5.3.7.2. **Uniforms**

Students must adhere to instructions issued by technical, supervisory or academic staff regarding the specific dress code required during practicals. Non-compliance will result in the student being denied access to the venue.

5.3.8. Attendance and Assessment

- 5.3.8.1 A student who, for any valid reason(Refer to Programme Rule 5.3.8.2 below), is absent from a particular practical or test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days of returning to the institution in order to be considered for a special assessment.
- 5.3.8.2 The DUT Rule G13(3)(a) which refers to special examinations also refers to special assessments set within departments for students who have missed coursework assessments. In these cases the department will determine the validity of the student's reason for not taking the assessment, and the nature of the special assessment.

5.3.9. Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in WIL placements. Failure to do so will be treated as a breach of discipline. Refer to the appropriate Health and Safety policies.

5.3.10 General Education

Students must complete the university's General Education Requirement. This includes following:

- DUT Cornerstone 101 and three 8 credit institutional modules
- Three 12 credit Faculty of Applied Sciences modules

5.3.11 Work Integrated Learning Rules

In addition to the DUT Rule G28:

- A student is required to attend and complete the Work Preparedness Programme offered by the department prior to undertaking WIL placement.
- The department undertakes to arrange WIL Placement
- As soon as the student has been accepted for a WIL placement he/she must register for the subject Maritime Shore-based Work Practice
- The student must comply with the rules and regulations as set out in the Industrial Environment where placed. The maritime industry operates 24 hours a day 365 days a year and a student on a WIL placement may be required to work on weekends and religious holidays.

6. NATIONAL DIPLOMA: MARITIME STUDIES (NAVIGATION) (NDMTSI)

Purpose of Qualification

Graduates of this qualification will have the requisite theoretical knowledge, understanding and practical proficiency to establish a successful career in the shipping industry

6.1 PROGRAMME STRUCTURE (3 YEAR)

Code	Modules	Common / Specialised	Assess- ment	Semester Of Study	HEMIS Credits	Pre-requisite Modules
MSCI102	Marine Science I	С	Ex	SI	0.083	
INML101	Introduction to Marine Law I	С	Ex	ŞI	0.042	
CSKI103	Communication Skills I	С	CA	SI	0.042	
CSER101	Computer Skills I	С	CA	ŞI	0.041	
MRMT101	Marine Mathematics I	С	CA	ŞI	0.083	
STRN101	Sea Transport I	С	CA	ŞI	0.083	
PRNVI0I	Principles of Navigation I	S	Ex	ŞI	0.083	
NISY102	Navigation Information Systems I	S	CA	SI	0.042	
STRN201	Sea Transport II	С	Ex	S2	0.083	STRN101
MALW101	Marine Law I	С	CA	S2	0.083	INML101
MEST202	Marine Environmental Studies II	S	Ex	S2	0.083	MSCI102
NARCI0I	Naval Architecture I	S	Ex	\$2	0.083	MRMTI0I + MSCII02
NAVG112	Navigation I (Theory) Module I	S	Ex	\$2	0.083	MRMTI0I + PRNVI0I
NAVG122	Navigation I (Chartwork) Module 2	S	Ex	S2	0.084	MRMTI0I + PRNVI0I
NISY202	Navigation Information Systems II	S	CA	S2	0.083	NISY102
MALW201	Marine Law II	С	Ex	S3	0.125	MALW201
STRN302#	Sea Transport II	С	Ex	S3	0.125	STRN201
NARC203	Naval Architecture II	S	Ex	S3	0.167	NARCI0I
NAVG202	Navigation II	S	Ex	S3	0.167	NAVG101
NISY312	Navigation Information Systems III (Mod I)	S	Ex	\$3	0.167	NISY202
MEST302#	Marine Environmental Studies III	S	Ex	S3	0.167	MEST202
MALW301#	Marine Law III	С	Ex	S4	0.250	MALW201
NARC303#	Naval Architecture III	S	Ex	S4	0.250	NARC203
NAVG302#	Navigation III	S	Ex	S4	0.248	NAVG202
NISY322#	Navigation Information Systems III (Mod 2)	S	Ex	S4	0.167	NISY312
STEC202	Ship Technology II	S	Ex	S4	0.167	MSCI102
MPSG201	Marine Practice (Sea-going)	S	CA	Yr3		-

KEY: All subjects are compulsory.

6.2 PROGRAMME INFORMATION

This information must be read in conjunction with the programme rules that follow.

6.2.1 Academic Integrity

Refer to the DUT General Rules pertaining to academic integrity G13 (I)(o) - covering falsification of academic records, plagiarism and cheating. These will be enforced wherever necessary to safeguard the worthiness of our qualifications and the integrity of the Faculty of Applied Sciences at DUT.

C=Common to both Navigation & Shore Based. S= Specialised (Navigation only) Assessment Method: Ex=Examination; CA=Continuous Assessment

Year of Study: S1 to S4 refers to the grouping of subjects usually registered for in subsequent semesters. Usually S1= First year First semester and S2 = First year, second semester etc.

[#]These subjects are final level subjects.

A pre-requisite subject means this subject must be passed prior to registration for the subsequent subject.

6.2.2 Code of Conduct for Students

A professional code of conduct pertaining to behaviour, appearance, personal hygiene and dress shall apply to all students registered with the Faculty of Applied Sciences, at all times. Refer to Programme Rule 4.3.8 below.

6.2.3 Attendance

Students are expected to achieve 100% attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Students are expected to be punctual for all academic activities. Penalties may be invoked for late attendance. Refer to Programme Rule 4.3.9 below.

6.2.4 Work Integrated Learning (WIL)

This programme requires the student/candidate to undergo a twelve month period of Work Integrated Learning (WIL) on completion of all prescribed compulsory and elective subjects (instructional offerings) in order to be awarded the qualification. Although the University undertakes to assist the student/candidate in obtaining suitable experiential learning placement, the onus is on the student/candidate to find an "employer". As soon as the student has been accepted for work integrated learning (WIL) he/she must register with the Department Secretary.

During the sea-going period the student will be required to complete and record all tasks in an On Board Training Record Book provided by the shipping company or crewing agency. The student must present the On Board Training Record Book to the Head of Department for sighting and signature after every tour of duty. Failure of any student to comply with the log book or On Board Training Record Book requirements above may cause the experiential learning not to be recognised towards the completion of the ND programme.

The following subject comprises the experiential learning component of the programme for sea-going students:

Register Code	Subject
MPSG201	Maritime Practice (Sea-going)

Refer to Programme Rule 6.3.7 below.

6.2.5 Assessment and Moderation

Students are expected to work steadily through the period of registration in order to achieve the highest results possible.

Assessment details are listed under each subject at the back of this handbook. Assessments could include a variety of testing methods including, but not limited to, written tests, oral tests, theoretical and/or practical examinations, group work and assignments.

Assignments must be handed personally to the lecturer who will record their receipt. Late submission will be penalised.

In the case of a continuous assessment subject (a subject which has no final examination/s or supplementary examination/s) opportunities for reassessment are provided for students who fail assessments. These are stipulated in the relevant study guide.

Moderation follows the DUT Assessment Policy stipulations. Refer to Programme Rule 6.3.9 below.

6.2.6 Employment Opportunities: Sea-going

The first line of employment may lie within a shipping company or with Transnet National Ports Authority (TNPA), where the graduate will enter the industry as a Deck Cadet, and on completion of the requisite sea-time, further study/training and ancillary courses, could one day aspire to the command of an ocean-going vessel or work in a number of divisions within TNPA (including tugs, pilotage, dredging and vessel traffic services).

Opportunities also exist with the South African Navy (SAN). However the student will need to meet the stringent physical and medical requirements of SAN. A graduate with the ND: Maritime Studies with sea-going experience can transit ashore into a number of positions in areas such as surveying; technical management; education, training and development; and crewing management.

6.2.7 SAMSA Eyesight Requirement

Students taking the sea-going option must, on registration, provide the Department with the result of a SAMSA (South African Maritime Safety Authority) eye test from a SAMSA-approved medical practitioner. The SAMSA office is situated on 17th floor of Durban Bay House, 333 Anton Lembede (formerly Smith) Street, Durban (Tel: 031 307 1501). A SAMSA regional office may also be consulted. Failure in this assessment will mean that a sea-going career will not be possible.

6.2.8 Requirements for Chief Mate COC

Marine Notice No. 14 of 2001, Point No 2, states: "The required academic subjects are covered in the S3 and S4 syllabi for the courses offered at the Durban University of Technology and Cape Peninsula University of Technology. This means that a candidate for the Chief Mate Certificate of Competency must complete S3 and S4 before being eligible to sit the final (Level 3 Assessment) examination. From January 2002 only candidates holding a pass from an accredited training institution in S3 and S4 will be eligible to be examined for the Chief Mate Certificate."

6.3. PROGRAMME RULES

6.3.1 Minimum Admission Requirements

6.3.1.1 Academic Achievement

No new students will be registered on the programme commencing January 2016.

6.3.1.2 Admission Requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT Rules G7(3), and G7(8) respectively, will apply. (Approved by Senate Rules Comm wef 2014/10)

6.3.1.3 Admission of International Students

- The DUT's Admissions Policy for International Students and DUT Rules G4 and G7(5) will apply.
- International students must meet the equivalent of programme minimum entrance requirements as stated above.
- An International applicant will be accepted onto the ND: Maritime Studies (Navigation) only if sponsored by a company.
- An applicant with South African Refugee Status will not be accepted into the ND: Maritime Studies (Navigation) due to the inability to acquire international travel visas.

(Approved by Senate Rules Comm wef 2014/10)

6.3.1.4 Admission of Students from other Institutions

In addition to the relevant DUT Rules a transferring student will only be accepted if there are places available and the student has met the applicable entrance requirements of the university.

(Approved by Senate Rules Comm wef 2014/10)

6.3.2 Selection Criteria

No new students will be registered onto the programme commencing January 2016.

6.3.3. Pass Requirements

In addition to the DUT Rules G12, G14 and G15, the following programme rules apply: 4.3.3.1 As per SAMSA safety specifications, a final mark of not lower than 60% is required for a pass in the following subjects:

Navigation I (both modules), II and III

Naval Architecture I, II and III

6.3.4. Reregistration Rules

In addition to the DUT Rule G16, and all prerequisite subjects as identified in the Learning Table Structure (4.1), the following programme rules apply:-

- **6.3.4.1.** Promotion from Semester 1 to Semester 2: Students must pass a minimum of 3 subjects.
- **6.3.4.2.** Promotion from Semester 2 to Semester 3: Students must pass all prerequisite subjects.
- **6.3.4.3.** Promotion from Semester 3 to Semester 4: Students must pass a minimum of 3 full subjects.

6.3.5. Exclusion Rules

In addition to DUT Rule G17, a first semester student who fails three or more subjects with a final result of less than 40% in each subject is not permitted to reregister in this programme. Deregistration from any subjects is subject to the provision of DUT Rule G6. (Approved by Senate Rules Comm wef 2014/10)

6.3.6. Interruption of Studies

In accordance with Rule G21A(b), the minimum duration for this programme will be 3 years of registered study and the maximum duration will be 5 years of registered study, including any periods of WIL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

6.3.7. Work Integrated Learning Rules

In addition to the DUT Rule G28:

A student is required to attend and complete the Work Preparedness Programme offered by the department prior to undertaking WIL placement. The department undertakes to assist the student in obtaining suitable WIL placement; however the student is expected to attempt to find an employer as part of the preparation for a placement.

The employer must be approved by the Department of Maritime Studies and accredited by the South African Maritime Safety Authority (SAMSA) where appropriate.

As soon as the student has been accepted for a WIL placement he/she must register for the subject Maritime Practice (Sea-Going) (MPSG201). The SAMSA approved On Board Training Record Book, all WIL projects and the performance evaluations shall be submitted to the department a minimum of two weeks prior to the student booking a SAMSA Level III Oral Assessment.

The student must comply with the rules and regulations as set out in the Industrial Environment where placed. The maritime industry operates 24 hours a day 365 days a year and a student on a WIL placement may be required to work on weekends and religious holidays

6.3.8. Code of Conduct

In addition to the Student Code of Conduct in the DUT General Handbook for Students, and the relevant requirements as stated in the appropriate Study Guides, the following rules apply:

6.3.8.1 Conduct of Students in Practical Facilities

Strict adherence to instructions issued by technical, supervisory or academic staff is required due to the need to ensure effective and safe practice in these facilities. Misconduct or disregard for instructions will be referred to the relevant disciplinary procedure. (Approved by Senate Rules Comm wef 2014/10)

6.3.8.2 Uniforms

Students must adhere to instructions issued by technical, supervisory or academic staff regarding the specific dress code required during practicals. Non-compliance will result in the student being denied access to the venue. (Approved by Senate Rules Comm wef 2014/10)

6.3.9. Attendance and Assessment

- **6.3.9.1.** A student who, for any valid reason(Refer to Programme Rule 4.3.9.2 below), is absent from a particular practical or test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days of returning to the institution in order to be considered for a special assessment.
 - (Approved by Senate Rules Comm wef 2014/10)
- **6.3.9.2.** The DUT Rule G13(3)(a) which refers to special examinations also refers to special assessments set within departments for students who have missed coursework assessments. In these cases the department will determine the validity of the student's reason for not taking the assessment, and the nature of the special assessment. (Approved by Senate Rules Comm wef 2014/10)

6.3.9.3. Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in WIL placements. Failure to do so will be treated as a breach of discipline. Refer to the appropriate Health and Safety policies. (Approved by Senate Rules Comm wef 2014/10)

7. NATIONAL DIPLOMA: MARITIME STUDIES (NAVIGATION) (EXTENDED CURRICULUM) (NDMSFI)

Purpose of Qualification

Graduates of this qualification will have the requisite theoretical knowledge, understanding and practical proficiency to establish a successful career in the shipping industry.

This qualification is offered through a three year programme (refer to item 4 above), or through an augmented curriculum - offered over a minimum of four years of study – which is devised to enhance student development and to improve the student's chances of successful completion.

7.1 PROGRAMME STRUCTURE (4YEAR)

Code	Modules	Com- mon / Special- ised	As- sess- ment	Semes- ter Of Study	HEMIS Cred- its	Pre-requisite Modules
ASMT101	Applied Science (Mathematics)	С	Ex	Year I	0.175	
ASPY101	Applied Science (Physics)	С	Ex	Year I	0.175	
CSIL101	Computer Skills and Information Literacy	С	CA	Year I	0.175	
CSIS101	Communication Skills and Introduction to Shipping	С	CA	Year I	0.175	
PRNVI0I	Principles of Navigation 1	S	Ex	2a	0.100	
IMLA101	Introduction to Marine Law I (Augmented)	S	Ex	2a	0.166	
STRN101	Sea Transport I	С	CA	2a	0.100	
NISY102	Navigation Information Systems 1	С	CA	2a	0.100	
STRN201	Sea Transport II	С	Ex	S2 / 2b	0.166	STRN101
MALW101	Marine Law I	С	CA	S2 / 2b	0.100	IMLA101
MEST202	Marine Environmental Studies II	S	Ex	S2 / 2b	0.100	ASPY101
NARA101	Naval Architecture I (Augmented)	S	Ex	S2 / 2b	0.100	ASPYI0I + ASMTI0I
NVGNIII	Navigation I (Theory) Module I (Augmented)	S	Ex	S2 / 2b	0.166	PRNVI0I + ASMTI0I
NVGN121	Navigation I (Chartwork) Module 2 (Augmented)	S	Ex	S2 / 2b	0.100	PRNVI0I + ASMTI0I
NISY202	Navigation Information Systems II	S	CA	S2 / 2b	0.100	NISY102
MALW201	Marine Law II	С	Ex	S3 / 3a	0.0091	MALW101
STRN302#	Sea Transport II	С	Ex	S3 / 3a	0.0091	STRN201
NARC203	Naval Architecture II	S	Ex	S3 / 3a	0.0091	NARA101
NAVG202	Navigation II	S	Ex	S3 / 3a	0.0091	NVGNI0I
NISY312	Navigation Information Systems III (Mod I)	S	Ex	S3 / 3a	0.0091	NISY202
MEST302#	Marine Environmental Studies III	S	Ex	S3 / 3a	0.0091	MEST202
MALW301#	Marine Law III	С	Ex	S4 / 3b	0.0091	MALW201
NARC303#	Naval Architecture III	S	Ex	S4 / 3b	0.0091	NARC203
NAVG302#	Navigation III	S	Ex	S4 / 3b	0.0091	NAVG202
NISY322#	Navigation Information Systems III (Mod 2)	S	Ex	S4 / 3b	0.0091	NISY312
STEC202	Ship Technology II	S	Ex	S4 / 3b	0.0091	ASPY101
MPSG201	Marine Practice (Sea-going)	S	CA	Yr4		

Assessment Method: Ex=Examination; CA=Continuous Assessment

7.2 PROGRAMME INFORMATION

Refer to 6.2 Programme Information under the ND: Maritime Studies (Navigation).

The ND: Maritime Studies (Navigation) (ECP) is to be completed in a minimum of six semesters of theoretical study (3 years) and a minimum of 12 months experiential training.

In order to be accepted as a Cadet Navigating Officer, students should complete the tuition part of the qualification ND: Maritime Studies (Navigation) by the recommended maximum age of 21 years.

Year of Study: S1 to S4 refers to the grouping of subjects usually registered for in subsequent semesters. Numbers 1-4 refer to the year of study, "a" = Semester 1 and "b" = Semester 2. (eg. 2a = second year, first semester).

[#]These subjects are final level subjects.

A pre-requisite subject means this subject must be passed prior to registration for the subsequent subject.

7.3 PROGRAMME RULES

Refer to 6.3 Programme Rules under the ND: Maritime Studies (Navigation) and the following rules which apply specifically to ND: Maritime Studies (Navigation) (ECP).

7.3.1 Minimum Admission Requirements

Refer to Rule 6.3.1 which is applicable to both the ND and ND(ECP).

7.3.2 Selection Criteria

Refer to Rule 6.3.2 which is applicable to both the ND and ND(ECP).

7.3.3 Pass Requirements

Refer to Rule 6.3.3 which is applicable to both the ND and ND(ECP).

7.3.4 Reregistration Rules in the Extended Curriculum Programme

In addition to the DUT Rule G16, and all prerequisite subjects as identified in the Programme Structure (7.1), the following programme rule applies:-

7.3.4.1 Students must complete all subjects of each year of the programme before promotion to the following year.

7.3.5 Exclusion Rules

Refer to Rule 6.3.5 which is applicable to both the ND and ND(ECP).

7.3.6 Interruption of Studies

In accordance with Rule G21A(b), the minimum duration for this programme will be 4 years of registered study and the maximum duration will be 5 years of registered study, including any periods of WIL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration. (Approved by Senate Rules Comm wef 2014/10)

7.3.7 Work Integrated Learning Rules

Refer to Rule 6.3.7 which is applicable to both the ND and ND(ECP).

7.3.8 Code of Conduct

Refer to Rule 6.3.8 which is applicable to both the ND and ND(ECP).

7.3.9 Attendance and Assessment

Refer to Rule 6.3.9 which is applicable to both the ND and ND(ECP).

7.3.10 Health and Safety

Refer to Rule 6.3.10 which is applicable to both the ND and ND(ECP).

8. NATIONAL DIPLOMA:MARITIME STUDIES (SHORE-BASED) (NDMTSI)

Purpose of Qualification

Graduates of this qualification will have the requisite theoretical knowledge, understanding and practical proficiency to establish a successful career in the shipping industry.

8.1 PROGRAMME STRUCTURE (3 YEAR)

Code	Modules	Com-	Assess-	C	LIEMIC	Pre-requi-
Code	Modules	mon /	ment	Semes- ter	Cred-	rre-requi-
		Special-	ment	Of	its	Modules
		ised			its	Modules
MCCILO2	M · C·		-	Study	0.002	
MSCI102	Marine Science I	С	Ex	SI	0.083	
INMLI0I	Introduction to Marine Law I	С	Ex	SI	0.042	
CSKI103	Communication Skills I	С	CA	SI	0.042	
CSER101	Computer Skills I	С	CA	SI	0.041	
MRMTI01	Marine Mathematics I	С	CA	SI	0.083	
STRN101	Sea Transport I	С	CA	SI	0.083	
PECN101	Principles of Economics	S	Ex	SI	0.083	
CMRLIII	Commercial Law (Mod 1)	S	Ex	SI	0.083	
STRN201	Sea Transport II	С	Ex	S2	0.083	STRN101
MALW101	Marine Law I	С	CA	S2	0.083	INMLI0I
CMRL121	Commercial Law (Mod 2)	S	Ex	S2	0.125	CMRLIII
ECST101	Economics of Sea Transport I	S	CA	S2	0.083	STRNI0I +
	•					PECN101
SHAD101	Shipping Administration I	S	CA	S2	0.125	STRN101
BAFI102	Business Admin: Financial	S	Ex	S2	0.125	
MALW201	Marine Law II	С	Ex	S3	0.125	MALW201
STRN302#	Sea Transport III	С	Ex	S3	0.125	STRN201
AMNMIII	Administration Management	S	Ex	S3	0.167	
	(Mod I)					
ECST201	Economics of Sea Transport II	S	CA	S3	0.167	ECST101
BAMN202	Business Admin: Management	S	Ex	S3	0.125	CSKI101
	II					
SADM202	Shipping Administration 11	S	Ex	S3	0.167	SHAD101
MALW301#	Marine Law III	С	Ex	S4	0.250	MALW201
AMNM121	Administration Management	S	Ex	S4	0.210	AMNMIII
	(Mod 2)					
SADM302	Shipping Administration III	S	Ex	S4	0.250	SADM202
ECST301	Economics of Sea Transport III	S	Ex	S4	0.250	ECST201
MPSB201	Marine Practice (Shore-based)	S	CA	Yr3		
		L				

KEY: All subjects are compulsory.

C=Common to both Navigation & Shore Based. S=Specialised (Shore Based only) Assessment Method: Ex=Examination; CA=Continuous Assessment

Year of Study: S1 to S4 refers to the grouping of subjects usually registered for in subsequent semesters. Usually S1= First year First semester and S2 = First year, second semester etc.

[#]These subjects are final level subjects.

A pre-requisite subject means this subject must be passed prior to registration for the subsequent subject.

8.2 PROGRAMME INFORMATION

This information must be read in conjunction with the programme rules that follow.

8.2.1 Academic Integrity

Refer to the DUT General Rules pertaining to academic integrity G13(1)(o) – covering falsification of academic records, plagiarism and cheating. These will be enforced wherever necessary to safeguard the worthiness of our qualifications, and the integrity of the Faculty of Applied Sciences at DUT.

8.2.2 Code of Conduct for Students

A professional code of conduct pertaining to behavior, appearance, personal hygiene and dress shall apply to all students registered with the Faculty of Applied Sciences, at all times. Refer to Programme Rule 8.3.8 below.

8.2.3 Attendance

Students are expected to achieve 100% attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Students are expected to be punctual for all academic activities. Penalties may be invoked for late attendance. Refer to Programme Rule 8.3.9 below.

8.2.4 Work Integrated Learning (WIL)

This programme requires the student/candidate to undergo a 12 month period of Work Integrated Learning (WIL) on completion of all subjects in order to be awarded the qualification. All prescribed compulsory and elective subjects (instructional offerings) and the prescribed WIL component must be completed in order to be awarded the qualification. Although the Institution undertakes to assist the student/candidate in obtaining suitable experiential learning placement, the onus is on the student/candidate to find an "employer". As soon as the student has been accepted for work integrated learning (WIL) he/she must register with the Department Secretary.

During the shore-based period the student is to complete a log book under the supervision of a training manager/supervisor who is obliged to submit quarterly reports to the Department, as well as a final report. These reports will form the evidence required to show completion of the experiential learning component.

The following subject comprises the experiential learning component of the programme for shore-based students:

Register Code	Subject
MPSB201	Maritime Practice (Shore-based)

Refer to Programme Rule 8.3.7 below.

8.2.5 Assessment and Moderation

Students are expected to work steadily through the period of registration in order to achieve the highest results possible.

Assessment details are listed under each subject at the back of this handbook.

Assessments could include a variety of testing methods including, but not limited to, written tests, oral tests, theoretical or practical examinations, group work and assignments.

Assignments must be handed personally to the lecturer who will record their receipt. Late submission will be penalised.

In the case of a continuous assessment subject (a subject which has no final examinations or supplementary examinations) opportunities for reassessment are provided for students who fail assessments. These are stipulated in the relevant study guide.

Moderation follows the DUT Assessment Policy stipulations.

Refer to Programme Rule 6.3.9 below.

8.2.6 Employment Opportunities: Shore-based

A number of employment opportunities exist within the shore-based sector of the maritime industry. These include port agency, stevedoring, clearing and forwarding, surveying, warehousing, project management and terminal management.

8.3 PROGRAMME RULES

8.3.1 Minimum Admission Requirements

8.3.1.1 Admission Requirements based on Work Experience, Age and Maturity; and Recognition of Prior Learning

The DUT Rules G7 (3), and G7 (8) respectively, will apply. (Approved by Senate Rules Comm wef 2014/10)

8.3.1.2 Admission of International Students

The DUT's Admissions Policy for International Students and DUT Rules G4 and G7 (5) will apply.

International students must meet the equivalent of programme minimum entrance requirements as stated above. (Approved by Senate Rules Comm wef 2014/10)

8.3.1.3 Admission of Students from other Institutions

In addition to the relevant DUT Rules a transferring student will only be accepted if there are places available and the student has met the applicable entrance requirements of the university. (Approved by Senate Rules Comm wef 2014/10)

8.3.2 Selection Criteria

No new students will be registered onto the programme commencing January 2016.

8.3.3 Pass Requirements

The DUT Rules G12, G14 and G15 apply. (Approved by Senate Rules Commwef 2014/10)

- **8.3.3.1** Promotion from Semester 1 to Semester 2: Students must pass a minimum of 3 subjects.
- **8.3.2.2** Promotion from Semester 2 to Semester 3: Students must pass all prerequisite subjects.
- **8.3.2.3** Promotion from Semester 3 to Semester 4: Students must pass a minimum of 3 full subjects.

8.3.4 Reregistration Rules

In addition to the DUT Rule G16, and all prerequisite and co-requisite subjects as identified in the Learning Table Structure (4.1), the following programme rules apply:-

8.3.5 Exclusion Rules

In addition to DUT Rule G17, a first year student who fails three or more subjects with a final result of less than 40% in each subject is not permitted to reregister in this programme. Deregistration from any subjects is subject to the provision of DUT Rule G6. (Approved by Senate Rules Comm wef 2014/10)

8.3.6 Interruption of Studies

In accordance with Rule G21A(b), the minimum duration for this programme will be 3 years of registered study and the maximum duration will be 5 years of registered study, including any periods of WIL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

(Approved by Senate Rules Comm wef 2014/10)

8.3.7 Work Integrated Learning Rules

In addition to the DUT Rule G28:

A student is required to attend and complete the Work Preparedness Programme offered by the department prior to undertaking WIL placement.

The department undertakes to assist the student in obtaining suitable WIL placement; however the student is expected to attempt to find an employer as part of the preparation for a placement.

As soon as the student has been accepted for a WIL placement he/she must register for the subject Maritime Practice (Shore-based) (MPSB201). The student must comply with the rules and regulations as set out in the Industrial Environment where placed. The maritime industry operates 24 hours a day 365 days a year and a student on a WIL placement may be required to work on weekends and religious holidays.

(Approved by Senate Rules Comm wef 2014/10)

8.3.8 Code of Conduct

In addition to the Student Code of Conduct in the DUT General Handbook for Students, and the relevant requirements as stated in the appropriate Study Guides, the following rules apply:

8.3.8.1 Conduct of Students in Practical Facilities

Strict adherence to instructions issued by technical, supervisory or academic staff is required due to the need to ensure effective and safe practice in these facilities. Misconduct or disregard for instructions will be referred to the relevant disciplinary procedure. (Approved by Senate Rules Comm wef 2014/10)

8.3.8.2 Uniforms

Students must adhere to instructions issued by technical, supervisory or academic staff regarding the specific dress code required during practicals. Non-compliance will result in the student being denied access to the venue. (Approved by Senate Rules Comm wef 2014/10)

8.3.9 Attendance and Assessment

- **8.3.9.1** A student who, for any valid reason(Refer to Programme Rule 4.3.9.2 below), is absent from a particular practical or test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days of returning to the institution in order to be considered for a special assessment.
 - (Approved by Senate Rules Comm wef 2014/10)
- **8.3.9.2** The DUT Rule G13(3)(a) which refers to special examinations also refers to special assessments set within departments for students who have missed coursework assessments. In these cases the department will determine the validity of the student's reason for not taking the assessment, and the nature of the special assessment. (Approved by Senate Rules Comm wef 2014/10)

8.3.10 Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in WIL placements. Failure to do so will be treated as a breach of discipline. Refer to the appropriate Health and Safety policies. (Approved by Senate Rules Comm wef 2014/10)

9 SERVICING

9.1 SERVICED SUBJECTS

9.1.1. The servicing department's rules apply to all serviced modules. The following modules for the Diploma in Nautical Studies and Diploma in Shipping and Logistics programmes are serviced externally to this department

Serviced Programme	Servicing Department	Serviced Modules	Module Code
Dip: Nautical	Department of Physics	Marine Science I, II	
Studies	Department of Mathematics	Marine Mathematics I, II	
	Department of English and Communications	Communication Skills I	
	Department of Information Technology	Computer Skills and Information Literacy	
		DUT Cornerstone 101	
		IGE: Leadership	
	General Education Modules - TBA	IGE: Values in the Workplace	
		IGE: Violence and Non-Violence	
		FGE: Applied Sciences and Society	
Dip: Shipping and Logistics	Department of English and Communications	Communication Skills I	
Logistics	Department of Information Technology	Computer Skills and Information Literacy	
	Department of Economics and	Economics (Micro)	
	Governance	Economics (Macro)	
	Department of Statistics	Introduction to Statistics Statistics I	
	General Education Modules - TBA	DUT Cornerstone 101	
		IGE: Constitutional Law and Human Rights	
		IGE: Cultural Diversity	
		IGE: Violence and Non-Violence	
		FGE: Introduction to Applied Sciences	

9.1.2. The servicing department's rules apply to all serviced subjects. The following subjects for the ND: Maritime Studies programmes are serviced externally to this department.

Serviced Programme	Servicing Department	Serviced Subject	Subject Code
ND: Maritime	Department of Physics	Marine Science	MSCI102
Studies (Naviga- tion)	Department of Mathematics	Marine Mathematics I	MRMT101
	Department of English and Communications	Communication Skills 1	CSKI103
	Department of Information Technology	Computer Skills I	CSER I 0 I
ND: Maritime	Department of Physics	Marine Science	MSCI102
Studies (Shore	Department of Mathematics	Marine Mathematics I	MRMT101
Based)	Department of English and Communications	Communication Skills 1	CSKI103
	Department of Information Technology	Computer Skills I	CSER 101
	Department of Applied Law	Commercial Law Mod 	CMRLIII
		Commercial Law I Mod 2	CMRL121
	Department of Financial Accounting	Business Administration Financial	BAFI102
	Department of Management and Entrepreneurial Studies	Administration Management Module I	AMNMIII
		Administration Management Module 2	AMNM121
		Business Administration: Management 2	BAMN202
	Department of Economics and Governance	Principles of Economics	PECN101

9.2. SERVICED QUALIFICATIONS

The following qualifications and subjects are serviced from this department:

Serviced Programme	Subject	Subject
00.11000.1108.0111110	3.2,000	Code
ND: Mechanical Engineering (Marine)	Naval Architecture I	NAMEI0I
ND: Mechanical Engineering (Marine)	Marine Engineering Knowledge I	MEKN101
ND: Mechanical Engineering (Marine)	Marine Law I	MALW101
ND: Mechanical Engineering (Marine)	Naval Architecture II	NAME202
ND: Mechanical Engineering (Marine)	Marine Engineering Knowledge II	MEKN201
ND: Mechanical Engineering (Marine)	Marine Law II	MALW201
ND: Mechanical Engineering (Marine)	Naval Architecture III	NAME301
ND: Mechanical Engineering (Marine)	Marine Engineering Knowledge III	MEKN301

9.2.1. NATIONAL DIPLOMA: MECHANICAL ENGINEERING (MARINE)

The Department of Maritime Studies services the Department of Mechanical Engineering for this qualification.

Candidates for this programme must apply for the ND: Mechanical Engineering. To enter this programme a student will require a minimum NSC rating 4 in English, Mathematics, Physical Science plus three 20 credit subjects.

Furthermore, the following electives for Marine Engineering must be selected:

- Naval Architecture (I, II and III),
- Marine Engineering Knowledge (I, II and III), and
- Marine Law (I and II)

Alternatively, candidates who already have a ND: Mechanical Engineering may apply for the above subjects for Non-Diploma purposes through the Department of Maritime Studies. By completing these subjects a candidate will meet the requirements for the theoretical component for a Certificate of Competency as a Marine Engineer Watchkeeper. (See 7.2 Marine Engineering - Non-Diploma Programme).

Instructional Programme for ND: Mechanical Engineering (Marine)

Code	Subjects	Assess- ment	Semes- ter		Pre-requisite Subjects
			Of Study		,
CSKI103	Communication Skills I	Ref ME	SI	Ref ME	Ref ME
CSER101	Computer Skills I	Ref ME	SI	Ref ME	Ref ME
MSTH101	Mathematics I	Ref ME	SI	Ref ME	Ref ME
MECH101	Mechanics I	Ref ME	SI	Ref ME	Ref ME
MEDRI01	Mechanical Engineering Drawing I	Ref ME	SI	Ref ME	Ref ME
FMEC202	Fluid Mechanics II	Ref ME	S2	Ref ME	Ref ME
THRM20I	Thermodynamics II	Ref ME	S2	Ref ME	Ref ME
MMAC202	Mechanics of Machines II	Ref ME	S2	Ref ME	Ref ME
ETECI0I	Electrotechnology I	Ref ME	S2	Ref ME	Ref ME
NAMEI0I	Naval Architecture I	Ex	S2	0.083	MATHIOI +
					MECHI0I
MEKN101	Marine Engineering	Ex	S2	0.083	MECHI0I
	Knowledge I				
MALW101	Marine Law I	CA	S2	0.083	CSKI103
SMAT202	Strength of Materials II	Ref ME	S3	Ref ME	Ref ME
FMEC302	Fluid Mechanics III	Ref ME	S3	Ref ME	Ref ME
THRM301	Thermodynamics III	Ref ME	S3	Ref ME	Ref ME
ETEC202	Electrotechnology II	Ref ME	S3	Ref ME	Ref ME
NAME201	Naval Architecture II	Ex	S3	0.167	NAME101
MEKN201	Marine Engineering Knowledge II	Ex	S3	0.083	MEKNI0I
MALW201	Marine Law II	CA	S3	0.125	MALW101
MMASC302	Mechanics of Machines III	Ref ME	S4	Ref ME	Ref ME
HMAC301	Hydraulic Machines III	Ref ME	S4	Ref ME	Ref ME
SMAT302	Strength of Materials III	Ref ME	S4	Ref ME	Ref ME
SPLT302	Steam Plant III	Ref ME	S4	Ref ME	Ref ME
ETEC302	Electrotechnology III	Ref ME	S4	Ref ME	Ref ME
NAME301	Naval Architecture III	Ex	S4	0.250	NAME202
MEKN301	Marine Engineering Knowledge III	Ex	S4	0.083	MEKN201

Ref ME = Refer to the Department of Mechanical Engineering

Ex = Final Examination; CA = Continuous assessment No Final Examination

9.2.2. MARINE ENGINEERING - NON DIPLOMA (NODIPM)

This non diploma programme of studies supplements previous studies. To enter this programme a student must comply with the requirements of the SAMSA Code for the relevant Certificate of Competency. This code can be found on www.samsa.org.za.Applications can be made to the nearest SAMSA office.

Code	Subjects	Assessment	Semester of Study	Pre-requisite Subjects
NVARI0I	Naval Architecture I	Ex	S2	MATHIOI + MECHIOI
MEKM101	Marine Engineering Knowledge I	Ex	S2	MECHI01
MALW101	Marine Law I	CA	S2	CSKI103
NVAR202	Naval Architecture II	Ex	S3	NAMEI0I
MEKM201	Marine Engineering Knowledge II	Ex	S3	MEKN101
MALW201	Marine Law II	CA	S3	MALW101
NVAR301	Naval Architecture III	Ex	S4	NAME202
MEKM3091	Marine Engineering Knowledge III	Ex	S4	MEKN201

Note: Marine Engineering Knowledge subject codes MEKM101, MEKM201 and MEKM301; and Naval Architecture subject codes NVAR201, NVAR202 AND NVAR301 are the codes for the Non-Diploma programme NODIPM.

10. SHORT COURSES

The following non-subsidised short courses are provided. The scheduled dates and costs per candidate are available from the Secretary:

Name of Short Course	Approved for offering	Duration
Dangerous, Hazardous and Harmful Cargoes	,	Duration 4 days
Electronic Chart, Display and Information System (ECDIS)	SENEX 2013/05	Duration 5 days
Electronic Navigation Systems (Management)	SENEX 2013/05	Duration 5 days
Electronic Navigation Systems (Operational Level)	SENEX 2013/05	Duration 10 days
Global Maritime Distress and Safety System (GMDSS)	2008/02	Duration 10 days
GMDSS Refresher	2008/02	Duration 5 days
Human Elements in Leadership & Management (HELM) (Maritime)	FB 2014/10	Duration 5 days
Marine Motorman - Grade I	2008/11	Duration 8 days
Marine Motorman - Grade 2	2008/11	Duration 4 days
Marine Motorman - Higher Grade	2008/11	Duration 15 days
Maritime Communications	2008/02	Duration 5 days

11. SUBJECT CONTENT

Note that all subjects are offered on a semester basis full time only. Please refer to the study guides for the respective subjects for more detail

II.I DIPLOMA IN NAUTICAL STUDIES COMMUNICATION SKILLS

Assessment: Continuous assessment based on 2 tests and 2 assignments.

Hours of tuition: Theory: 2 periods per week

Syllabus: Communication theory, oral presentations, technical

writing skills, group communication skills

COMPUTER SKILLS AND INFORMATION LITERACY

Assessment: Continuous assessment based on 2 tests and 2 assignments.

Hours of tuition: Theory: 2 periods per week

Practical: I period per week

Syllabus: Word processing, spreadsheets, power-point, e-mail,

internet, search engines, academic data-bases

MARINE MATHEMATCIS I

Assessment: Continuous assessment based on 4 class tests

Hours of tuition: Theory: 3 x periods per week.

Syllabus: Algebra, graphs, proportion, variation and interpolation,

geometry, trigonometry

MARINE MATHEMATICS II

Assessment: Continuous assessment based on 4 class tests

Hours of tuition: Theory: 3 x periods per week.

Syllabus: Mensuration, spherical triangles, vectors, ellipse

MARINE SCIENCE I

Assessment: Semester mark is calculated from the average of two test

Examination consists of one three hour paper

Hours of tuition: Theory: 3 x periods per week

Practicals: 2 x periods per week

Syllabus: Mass, weight and force; distance, velocity and acceleration;

circular motion and rotation; statics; work, energy and

power; machines; density; fluids and flotation.

MARINE SCIENCE II

Assessment: Semester mark is calculated from the average of two test

Examination consists of one three hour paper

Hours of tuition: Theory: 3 x periods per week

Practicals: 2 x periods per week

Syllabus: Temperature; expansion of solids and fluids; gas laws; waves;

electromagnetic radiation; light and sound.

NAVIGATION - ELECTRONIC NAVIGATION SYSTEMS I

Assessment: Continuous assessment based on 2 class tests and an

assignment

Hours of tuition: Theory: 3 x periods per week

Syllabus: Wave theory, satellite navigation, echo-sounder, speed logs,

ECDIS, and other bridge equipment.

INTRODUCTION TO SHIPBOARD OPERATIONS

Assessment: Continuous assessment based on 2 class tests and an

assignment

Hours of tuition: Theory: 3 x periods per week

Syllabus: South African legal system; criminal and civil law;

international law, codes and conventions; company and

shipboard management structures

11.2 DIPLOMA IN SHIPPING AND LOGISTICS

COMMUNICATION SKILLS

Assessment: Continuous assessment based on 2 tests and 2 assignments.

Hours of tuition: Theory: 2 periods per week

Syllabus: Communication theory, oral presentations, technical

writing skills, group communication skills

COMPUTER SKILLS AND INFORMATION LITERACY

Assessment: Continuous assessment based on 2 tests.

Hours of tuition: Theory: 3 periods per week

Practical: I period per week

Syllabus: Word processing, spreadsheets, power-point, e-mail,

internet, search engines, academic data-bases

ECONOMICS (MICRO)

Assessment: Semester mark is calculated from the average of two test

Examination consists of one three hour paper

Hours of tuition: Theory: 3 x periods per week

Syllabus: Introductory concepts, circular flow of economic activity;

goods market; elasticity; labour market; production and

costs: market structures

ECONOMICS (MACRO)

Assessment: Semester mark is calculated from the average of two test

Examination consists of one three hour paper

Hours of tuition: Theory: 3 x periods per week

Syllabus: macro-economic objectives and measurement; public

sector; monetary sector and foreign sector.

INTRODUCTION TO SHIPPING

Assessment: Continuous assessment based on 2 tests and 2 assignments.

Hours of tuition: Theory: 2 periods per week

Syllabus: Maritime terminology, types of ships, types of cargoes,

major port and shipping routes, shipping documentation,

national and international maritime agencies.

INTRODUCTION TO STATISTICS

Assessment: Continuous assessment based on 2 tests and 1 assignment.

Hours of tuition: Theory: 2 periods per week

Syllabus: Quantitative, ordinal and qualitative data; primary and

secondary data; survey methods for collecting data; sampling methods; presentation of data; measures of central location and dispersion; interpretation and analysis

of data.

STATISTICS I

Assessment: Continuous assessment based on 2 tests and 1 assignment.

Hours of tuition: Theory: 2 periods per week

Syllabus: Purpose and methods of prediction and forecasting;

scatter diagrams; linear regression; correlation; time

series; software packages.

11.3 GENERAL EDUCATION MODULES DUT CORNERSTONE 101

Assessment: Continuous assessment based on reflective journal, tutorial

attendance, project, oral presentation and peer assessment.

Hours of tuition: Theory: 2 periods per week

Tutorials: 2 periods per week

Syllabus: Personal, political, historical, environmental and social

journeys; ethics, diversity and critical citizenry.

CONSTITUTIONAL LAW AND HUMAN RIGHTS

Assessment: Continuous assessment based on I class test; group and

individual assignments; and oral presentation

Hours of tuition: Theory: 2 periods per week

Syllabus: Basic features of the Constitution; constitutional history;

organs of State; human rights, Bill of Rights;

CULTURAL DIVERSITY

Assessment: Continuous assessment based on I class test; group and

individual assignments; and oral presentation

Hours of tuition: Theory: 2 periods per week

Syllabus: Basic features of the Constitution; constitutional history;

organs of State; human rights, Bill of Rights;

INTRODUCTION TO APPLIED SCIENCES

Assessment: Continuous assessment based on written assignment;

presentation; project; and class tests.

Hours of tuition: Theory: 2 periods per week

Syllabus: Physics in everyday life; introduction the mathematics;

introduction to chemistry and introduction to statistics.

LEADERSHIP

Assessment: Continuous assessment based on participation in classes,

written report, oral presentation and weekly blog.

Hours of tuition: Theory: 2 periods per week

Syllabus: Negotiation of ground rules; experience of leadership;

concepts and theories of leadership; preparing for

community engagement.

ROLE OF APPLIED SCIENCE IN SOCIETY

Assessment: Continuous assessment based written assignment;

presentations; tests; portfolio of evidence and project

Hours of tuition: Theory: 2 periods per week

Syllabus: Biotechnology in society; horticulture in society; chemistry

in society; sport in society; clothing and textile in society;

and foods: facts and fads.

VALUES IN THE WORKPLACE

Assessment: Continuous assessment based 2 assignments; oral

presentation; reflection and peer assessment

Hours of tuition: Theory: 2 periods per week

Syllabus: Personal values; ethics; respect; interconnectedness;

honesty; creativity and human diversity, ethics, leadership.

VIOLENCE AND NON-VIOLENCE

Assessment: Continuous assessment based research project, peer

assessment and literature review.

Hours of tuition: Theory: 2 periods per week

Syllabus: Personal, institutional and societal violence; gender and

violence; violence within institutions; roots of violence

within South African history.

11.4 NATIONAL DIPLOMA: MARITIME STUDIES

(Navigation and Shore Based)

Note that all subjects are offered on a semester basis full time only. Please refer to the study guides for the respective subjects for more detail.

ADMINISTRATION MANAGEMENT (Module I)

- I. Assessment:
- (a) The semester mark is calculated from the average of a minimum of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:
 - Theory: 4 periods per week
- Syllabus: The role of administrative management in an organisation. Organisational structure. Structure in the enterprise and for administrative management. Management of an administrative office.

ADMINISTRATION MANAGEMENT (Module 2)

- Assessment:
- (a) The semester mark is calculated from the average of a minimum of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:
 - Theory: 4 periods per week
- Syllabus: Communication in the administrative office. Office systems, procedures and methods. The management of the office environment. BCE Act, Occupational Health and Safety Act.

BUSINESS ADMINISTRATION FINANCIAL I

- Assessment:
- (a) The semester mark is calculated from the average of a minimum of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:
 - Theory: 2 periods per week
- 3. Syllabus: Taxation, Inventory and purchase management, Accounting

BUSINESS ADMINISTRATION MANAGEMENT II

- Assessment:
- (a) The semester mark is calculated from the average of 3 tests.
- (b) The examination consists of one 3-hour open-book paper.
- 2. Hours of tuition:
 - Theory: 2 periods per week
- 3. Syllabus: Management functions, Project management

COMMERCIAL LAW (Module 1)

Assessment:

- (a) The semester mark is calculated from the average of a minimum of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:

Theory: 4 periods per week

 Syllabus: Introduction to the Study of Law, General Principles of the Law of Contract, Contract of Sale, Law of Agency

COMMERCIAL LAW (Module 2)

Assessment:

- (a) The semester mark is calculated from the average of a minimum of 2 tests
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:

Theory: 4 periods per week

 Syllabus: Contract of Lease, Law relating to negotiable instruments (including payment and tender), Law of Insurance, E-commerce, An introduction to International Sales Transactions (CISG), An introduction to Import and Export Regulations (customs and excise)

COMMUNICATION SKILLS I

Assessment:

Continuous assessment based on 2 tests and 2 assignments.

2. Hours of tuition:

Theory: 2 periods per week

3. Syllabus: Communication theory, Oral publications, Technical writing skills, Group communication skills

COMPUTER SKILLS I

- 1. Assessment: Continuous assessment on the basis of 2 tests and 2 assignments.
- 2. Hours of tuition:

Theory: 2 periods per week

3. Syllabus: Hardware, Software, Computer use

ECONOMICS OF SEATRANSPORT I

- 1. Assessment: Continuous assessment on the basis of 2 written tests and 2 assignments.
- Hours of tuition:

Theory: 2 periods per week

3. Syllabus: The marine transport industry, Demand and supply of shipping services, Marine transport economics

ECONOMICS OF SEATRANSPORT II

- Assessment: Continuous assessment on the basis of 3 written tests and I assignment.
- 2. Hours of tuition:

Theory: I period per week

 Syllabus: Market imperfections, Conferences and consortia, Bulk pools, Policy and instruments, SA seaborne commerce.

ECONOMICS OF SEATRANSPORT III

- Assessment
- a) The semester mark is calculated from an average of 2 tests.
- b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:

Theory: I period per week

3. Syllabus: Seaport management and operations. Ship/port relationships. Port policies.

MARINE ENVIRONMENTAL STUDIES II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:

Theory: I period per week

3. Syllabus: Instruments and observations, Basic meteorology, Sources of weather information

MARINE ENVIRONMENTAL STUDIES III

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:

Theory: 2 periods per week

 Syllabus: Physical meteorology, Synoptic meteorology, Oceanography

INTRODUCTION TO MARINE LAW I

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 2-hour paper.
- 2. Periods of tuition:

Theory: 2 periods per week

3. Syllabus: Introduction to law, Principles relating to maritime practice, Custom and usage, Maritime applications

MARINE LAW I

- Assessment: Continuous assessment on the basis of 3 written tests.
- Periods of tuition:

Theory: 2 periods per week

 Syllabus: International maritime law, Domestic maritime legislation, Administrative infrastructure, Industrial relations

MARINE LAW II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:

Theory: 3 periods per week

3. Syllabus: Carriage of goods, International conventions, Shipping practice

MARINE LAW III

- I. Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:

Theory: 3 periods per week

3. Syllabus: Marine insurance, Legislation related to shipping, The ship master, Wreck, salvage and towage, General average

MARINE MATHEMATICS I

- Assessment: Continuous assessment on the basis of 4 written tests
- 2. Periods of tuition:

Theory: 3 periods per week

3. Syllabus: Algebra, Plane trigonometry, Spherical trigonometry, Mensuration and geometry, Calculus, Statistics

MARINE SCIENCE I

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- Periods of tuition:

Theory: 2 periods per week

Practical: 2 periods per week

3. Syllabus: Heat, Light, Wave theory, Magnetism, Electricity, Applied chemistry, Statics and dynamics

NAVAL ARCHITECTURE I

- I. Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- (c) A final mark of 60% must be obtained.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Ship construction, Flotation, Basic ship stability

NAVAL ARCHITECTURE II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- (c) A final mark of 60% must be obtained.
- Periods of tuition:
 - Theory: 2 periods per week
- Syllabus: Construction details and methods, Structural strength, Transverse and longitudinal stability, Resistance and propulsion

NAVAL ARCHITECTURE III

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- (c) A final mark of 60% must be obtained.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- Syllabus: Specialized ship construction, Stability evaluation, Specialized stability assessment, Stress analysis of ships, Legal requirements

PRINCIPLES OF NAVIGATION I

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- Syllabus: Earth-navigation methods, Projections and chart construction, General astronomy, Celestial sphere, Principles of position fixing

NAVIGATION I (Modules I and 2)

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests in each module.
- (b) The examinations consist of a 3-hour paper in each module.
- (c) A final mark of 60% must be obtained in each module.

- 2. Periods of tuition:
 - Theory: 3 periods per week per module
- 3. Syllabus: Ocean navigation, Coastal navigation

NAVIGATION II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- (c) A final mark of 60% must be obtained.
- Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Harbour navigation, Advanced coastal navigation, Advanced ocean navigation

NAVIGATION III

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests and a passage planning assignment.
- (b) The examination consists of one 3-hour paper.
- (c) A final mark of 60% must be obtained.
- Periods of tuition:
 - Theory: 5 periods per week
- 3. Syllabus: Voyage planning, Specialized navigation procedures, Search and rescue, Evaluation of navigational information

NAVIGATION INFORMATION SYSTEMS I

- Assessment:
 - Continuous assessment on the basis of 3 written tests and I assignment.
- Periods of tuition:
- (a) Theory: 2 periods per week
- (b) Practical: I period per week
- Syllabus: The principles of radio, Heading, speed and distance instruments, Position fixing systems, Radar

NAVIGATION INFORMATION SYSTEMS II

- Assessment: Continuous assessment on the basis of 3 written tests and 1 practical test. Failure in the practical component will result in failure in the subject.
- 2. Periods of tuition:
- (a) Theory: 2 periods per week
- (b) Practical: 2 periods per week
- Syllabus: Position fixing systems, Radar, Automatic radar plotting aids, Use of electronic navigation equipment

NAVIGATION INFORMATION SYSTEMS III (Module 1)

- Assessment:
- (a) Continuous assessment for practicals.
- (b) The semester mark is calculated from the average of 2 tests.
- (c) The examination consists of one 3-hour paper.
- Periods of tuition:
- (a) Theory: 3 periods per week
- (b) Practical: I period per week
- 3. Syllabus:
- (a) Theory: Radar systems, Electronic position fixing systems, Satellite systems, Automatic pilots, ECDIS, Bridge resource management
- (b) Practical

NAVIGATION INFORMATION SYSTEMS III (Module 2)

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Marine compasses, Integrated bridge systems, New developments

PRINCIPLES OF ECONOMICS I

- Assessment:
- (a) The semester mark is calculated from the average of a minimum of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Hours of tuition:
 - Theory: 4 periods per week
- Syllabus: Numeracy and graphical skills, Economic terminology, Circular flow of economic activity in a 2-sector model, The goods market, Elasticity, The labour market, Production costs, The foreign sector

SEATRANSPORT I

. Assessment:

Continuous assessment on the basis of 3 written tests.

2. Periods of tuition:

Theory: 3 periods per week

 Syllabus: Introduction to ships and ship types, Maritime Geography, Introduction to ship construction, Ship-based and shore-based personnel

SEATRANSPORT II

Assessment:

- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour theory paper.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- 3. Syllabus: Cargo handling equipment, Cargo storage & carriage, Specialized cargoes, Safety, Commercial practice

SEATRANSPORT III

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour theory paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- Syllabus: Safety management, Cargo operations, Certification and survey of ships, Maintenance

SHIPPING ADMINISTRATION I

Assessment:

Continuous assessment based on 3 tests and 1 assignment

- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Ships and trade, Shipping Business, The international Transport Chain, Shipping Agencies and Port Authorities, Ship Chartering

SHIPPING ADMINISTRATION II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests and I assignment.
- (b) The examination consists of one 3-hour theory paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- Syllabus: Inco Terms, Import and Export Documentation, Importing Transactions/Procedure, Exporting Transactions / Procedure

SHIPPING ADMINISTRATION III

- Assessment:
- (a) The semester mark is calculated from the average of I test and 2 assignments.
- (b) The examination consists of one 3-hour theory paper.
- Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Bills of Lading, Local & International Legislation dealing with Sea Transport Documents, Charter-parties

SHIP TECHNOLOGY II

Assessment:

- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- Syllabus: Propulsion systems and machinery, Auxiliary machinery, Control system applications, Anti-pollution and safety systems

II.5 MARINE ENGINEERING (Electives and Non Diploma Subjects) MARINE LAW I

- Assessment: Continuous assessment on the basis of 3 written tests.
- Periods of tuition:
 - Theory: 2 periods per week
- Syllabus: International maritime law, Domestic maritime legislation, Administrative infrastructure, Industrial relations

MARINE LAW II

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- 3. Syllabus: International conventions; Shipping practice

MARINE ENGINEERING KNOWLEDGE I

- L. Assessment:
- (a) The semester mark is calculated from 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Watch keeping practice, Materials, Instrumentation, Internal combustion engines and auxiliary systems

MARINE ENGINEERING KNOWLEDGE II

- L. Assessment:
- (a) The semester mark is calculated from 2 tests.
- (b) The examination consists of one 3-hour paper.
- Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Steam plant and auxiliary systems, Power transmission systems, Pumps and pumping systems, Marine electrical equipment, Refrigeration, Ship handling and manoeuvring

equipment, Pollution control, Safety, firefighting equipment, Ship maintenance, Management

MARINE ENGINEERING KNOWLEDGE III

- Assessment:
- (a) The semester mark is calculated from 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Materials, Instrumentation and control, Fluids and lubricants, Internal combustion engines and auxiliary systems, Steam plant and auxiliary systems, Power transmission, Pumps and pumping systems, Marine electrical equipment, Refrigeration, Ship handling and manoeuvring equipment, Pollution control, Safety, firefighting equipment, Ship maintenance, Management

NAVAL ARCHITECTURE I

- Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 2 periods per week
- 3. Syllabus: Ship construction, Flotation, Basic ship stability

NAVAL ARCHITECTURE II

- L. Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- 3. Syllabus: Construction details and methods, structural strength, Transverse and longitudinal stability, Resistance and propulsion

NAVAL ARCHITECTURE III

- L. Assessment:
- (a) The semester mark is calculated from the average of 2 tests.
- (b) The examination consists of one 3-hour paper.
- 2. Periods of tuition:
 - Theory: 3 periods per week
- Syllabus: Specialized ship construction, Stability evaluation, Specialized stability assessment, Stress analysis of ships, Legal requirements