

# MARITIME STUDIES



2022  
HANDBOOK



FACULTY OF  
APPLIED  
SCIENCES

HANDBOOK FOR 2022

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 GI (8) and (9), and to the process of dealing with students' issues.

## **STRATEGIC DIRECTION (2020-2024)**

### **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**

1. **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

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## **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 3303
Facsimile No:	031 373 2175
Email:	dutfas@dut.ac.za
Location:	Block S4 Level 3, Steve Biko Campus

Faculty Assistant:	Mr. S Masuku
General Enquiries No:	031 373 3036
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Location:	Block S4 Level 3, Steve Biko Campus

Executive Dean:	Prof S Singh
Executive Dean's Secretary:	Ms. N. Naidoo
Tel No:	031 373 2720
Facsimile No:	031 373 2724
Email:	dutfas@dut.ac.za
Location:	Between Block S6 and S7, Level 4, Steve Biko Campus

## 2. DEPARTMENTAL STAFF

Head of Department	:	Mr NM Manqele, MSc Environmental Sciences (UKZN), BSc Hons (UNISA), B MilSc (SUN),
Associate Professor	:	Prof S Bauk, PhD (University of Belgrade - Serbia), MSc (University of Belgrade - Serbia), Bachelor's Diploma (University of Montenegro)
Lecturers	:	Mrs BM Masuku, MSc Maritime Affairs (WMU), BEd (UNIZULU), Higher Certificate in Adult Basic Education (UNISA)
	:	Mr NR Mtshali. B MilSc (SUN)
	:	Mr E Ramulifho, BSc (UNIVEN), BSc Hons (UP), MSc Climate Change & Oceanography (UCT), MSc Maritime Affairs (WMU)
	:	Mr AI Zangwa. MSc Maritime Affairs (WMU), BTech Business Admin (DUT), NDip Maritime Studies (DUT)
	:	Mr L Ntshangase. Master of Economics (SMU), BTech Operations Management (DUT), NDip Maritime Studies (DUT)
Secretary	:	Ms A Ramouthar. BTech: Commercial Administration (DIT); NDip Commercial Admin (ML Sultan), NC: Hotel Reception (ML Sultan)

### 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
Diploma in Nautical Studies	DINAUI	1 <sup>st</sup> Offered January 2016	94831
Diploma in Shipping and Logistics	DISHLI	1 <sup>st</sup> Offered January 2016	97687

#### Advanced Diploma

Qualifications	Qual Code	Important Dates	SAQA NLRD ID
Advanced Diploma in Nautical Studies	ADNAUI	1 <sup>st</sup> Offered January 2019	TBA
Advanced Diploma in Shipping and Logistics	ADSHLI	1 <sup>st</sup> Offered January 2019	101560
Advanced Diploma in Marine Engineering	ADMREI	1 <sup>st</sup> Offered January 2020	TBA

#### Postgraduate Diploma (PGDip)

Qualifications	Qual Code	Important Dates	SAQA NLRD ID
Postgraduate Diploma in International Shipping	PDISHI	1 <sup>st</sup> Offered January 2020	TBA

### 4. DIPLOMA: NAUTICAL STUDIES (DINAUI)

#### 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 (DINAUI)

Code	Modules	Core Fundamental Elective	Assess -ment	Semester of Study	HEMIS Credits	Prerequisite Modules
MRNM101	Marine Mathematics 1	F	CA	1A	0.100	
MRSN101	Marine Science 1	F	EX	1A	0.100	
CMIL101	Computer Skills and Information Literacy	F	CA	1A	0.100	
CMSS101	Communication Skills	F	CA	1A	0.100	
CSTN101	IGE: DUT Cornerstone 101	F	CA	1A	0.100	
MRNM201	Marine Mathematics 2	F	CA	1B	0.100	Marine Mathematics 1
MRSN201	Marine Science 2	F	EX	1B	0.067	Marine Science 1
ISOP101	Introduction to Shipboard	F	CA	1B	0.100	
NENS101	Navigation – Electronic Navigation Systems 1	C	CA	1B	0.067	
LDSH101	Choice of 1 of the following electives (IGE): • IGE: Leadership	E	CA	1B	0.067	
VWKP101	• IGE: Values in the Workplace					
VNVL101	• IGE: Violence and Non-Violence					
RASS101	FGE: Applied Sciences and Society	E	CA	1B	0.100	
NMEN101	Navigation – Meteorology and Environment Management 1	C	EX	2A	0.100	Marine Science 2
NENS201	Navigation – Electronic Navigation Systems 2	C	EX	2A	0.100	Navigation – Electronic Navigation Systems 2
SHPM101	Shipboard Management 1	C	EX	2A	0.133	Introduction to Shipboard Operations
SSCN101	Ship Stability and Construction 1	F	EX	2A	0.100	Marine Mathematics Marine Science
GENV101	Choice of 1 of the following electives (IGE): • IGE: The Global Environment	E	CA	2A	0.067	
TENE101	• IGE: The Entrepreneurial Edge					
NMEN201	Navigation – Meteorology and Environment Management 2	C	EX	2B	0.100	Navigation – Meteorology & Environment
NENS301	Navigation – Electronic Navigation Systems 3	C	EX	2B	0.100	Navigation – Electronic Navigation Systems 2
SHPM201	Shipboard Management 2	C	EX	2B	0.100	Shipboard Management 1
SSCN201	Ship Stability and Construction 2	C	EX	2B	0.100	Ship Stability & Construction 1
ASWL101	FGE: Applied Science and Society	F	CA	2B	0.100	
NVCL101	Navigation – Calculations 1	C	EX	3A	0.100	Marine Mathematics 2
NOCN101	Navigation – Ocean and Coastal Navigation 1	C	EX	3A	0.167	Marine Mathematics 2
SHPM301 #	Shipboard Management 3	C	EX	3A	0.100	Shipboard Management 2
SSCN301 #	Ship Stability and Construction 3	C	EX	3A	0.100	Ship Stability & Construction 2
EQDV101	Choice of 1 of the following electives (IGE): • IGE: Equality and Diversity	E	CA	3A	0.067	
HCDK101	• IGE: HIV and Communicable Diseases in KZN					
NVCL201 #	Navigation – Calculations 2	C	EX	3B	0.067	Navigation – Calculations 1
NOCN201 #	Navigation – Ocean and Coastal Navigation 2	C	EX	3B	0.100	Navigation – Ocean & Coastal Navigation 1
NSMR101 #	Navigation – Simulation (Radar and ARPA)	C	CA	3B	0.067	Navigation – Electronic Navigation Systems 3
NSME101 #	Navigation – Simulation (ECDIS)	C	CA	3B	0.100	Navigation – Electronic Navigation Systems 3
MESY101	Marine Engineering Systems	C	EX	3B	0.100	Marine Science 2

ASES101 ASCE101	Choice of 1 of the following electives (FGE): • FGE: Applied Sciences for Environment Sustainability • FGE: Applied Sciences and Community Engagement	E	CA	3B		
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KEY: All subjects are compulsory.

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

Year of Study: S1 to S6 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.

## 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 (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.

### 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 module 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 modules (a module 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.

### 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 sea-going career will not be possible.

**The selection criteria for the National Cadetship Programme** The following industry selection criteria applies for students seeking employment on completion of the Diploma in Nautical Studies

##### **Physical fitness**

The student will be required to pass a SAMSA medical examination by a SAMSA approved Doctor, as described in the Merchant Shipping (Eyesight and Medical Examination) regulation of 2004 and amended in 2015. This also includes body mass indexing which must meet standards. Note that some flags will not issue a Seamen's Record Book (Discharge Book) if the applicant has a life-threatening disease or condition.

##### **Academic qualifications**

Student must meet the requirements stipulated in the 'SAMSA Code', by having passed the minimum required tertiary Modules at the University of Technology or other SAMSA approved institution of learning. Fluency in English language ("the language of the sea") is required for safety reasons.

##### **Personality profile**

A profile of the student's personality (including preferences and dislikes) will be tested against the benchmarks set for the industry. A typical application is the PI (Predictive Index) which is widely used in the maritime industry.

##### **Aptitude Tests**

A test, which assesses the students' aptitude to handle the complexities of the career and the ability to cope with the academic programme, will be conducted.

Only those students that meet the benchmark will be considered.

A typical application is the APRO test. Most companies have their own in-house test which all students must complete prior to the interview.

#### **Criminal Record**

Students should not have a criminal record. If not ascertained this will be picked up when applying for various visas some of which directly prohibit employment. This would also compromise the perceived reputation of integrity of South African seafarers, to the detriment of all.

#### **Personal interviews**

Interviews will indicate the students' preparedness for the cadetship, the motivating factors behind the career choice as well as long term plans for the future career. Only students with that meet the interview standards will be considered.

#### **Gender**

Participating companies have indicated their preferences in gender, which are driven by on-board conditions. Where possible, females will be appointed to those companies that have no restrictions on this category of student. An assessment of companies who may be prepared to accommodate female cadets indicates +/-10% of current total cadet berths currently available for the National Cadet Project.

#### **Age**

Generally accepted by Shipping Companies to be between 18 – 25 years of Age. Applicants exceeding this limit will have significantly reduced chances of employment.

### **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

<b>Compulsory Subject</b>	<b>NSC</b>
English	4
Mathematics	4
Physical Science	4

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

<b>Compulsory Subject</b>	<b>HG</b>	<b>SG</b>
English	E	D
Mathematics	E	D



Physical Science	E	D
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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%

iv) a N4 Certificate in appropriate subjects with a pass in English NSC 4 and one of the following credit combinations:

- recognised 20 credit NSC subjects and Mathematics with a rating of 4 and N4 Engineering Science with a minimum achievement of 50%; or
- recognised 20 credit NSC subjects and Physical Science with a rating of 4 and N4 Mathematics with a minimum achievement of 50%; or
- recognised 20 credit NSC subjects with a rating of 4 and N4 Engineering Science and Mathematics with a minimum achievement of 50%

#### **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 Diploma in Nautical Studies only if sponsored by a company.
- An applicant with South African Refugee Status will not be accepted into the) Diploma in Nautical Studies 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.

#### **4.3.2.2 Applicants entering via Articulation**

Applicants holding a Higher Certificate in Applied Sciences who apply to articulate into the Diploma, will be selected for entry using a ranking system based on their aggregate marks. The number of students accepted into the programme will be capped at a maximum of 20 students

#### **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 1 and 2
- Navigation – Ocean and Coastal Navigation 1 and 2

#### **4.3.4. Reregistration Rules**

The DUT Rule G16 applies

#### **4.3.5. Exclusion Rules**

In addition to DUT Rule G17, a first-year student who fails 50% plus one of the 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 G6A.

#### **4.3.6. Interruption of Studies**

In accordance with Rule G21 A(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:

- **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.

- **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

- 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.
- 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. ADVANCED DIPLOMA IN NAUTICAL STUDIES (ADNAUI)

#### Purpose of the Qualification

The Advanced Diploma in Nautical Studies is aimed at sea-going personnel wanting to transition ashore. Career opportunities include employment as safety, security and environmental officers; classification society surveyors; safety administration surveyors; and protection and indemnity adjusters.

#### 5.1 PROGRAMME STRUCTURE (ADNAUI)

Code	Modules	Core Fundamental Elective	Assessment	Semester of Study	HEMIS Credits	Prerequisite Modules
GLMD101	Global Maritime Domain	C	EX	S1	0.200	
SHBM101	Shipping Business Management	C	EX	S1	0.100	
SRSM101	Safety, Risk and Security Management	C	EX	S1	0.200	
FMNG101	Financial Management	C	EX	S2	0.100	
MENM101	Marine Environmental Management	C	EX	S2	0.200	
MSRV101	Marine Surveying	C	EX	S2	0.200	

#### 5.2 PROGRAMME INFORMATION

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

##### 5.2.1 Suitable Candidate Selection

In addition to the Minimum Admission Requirements, the following selection process will determine placement in the qualification:

- Selection into the qualification is based on the student's academic performance in the National Diploma in Maritime Studies or Diploma in Nautical Studies or a recognised equivalent
- and / or appropriate work experience, and
- a ranking system will be used.

### **5.2.2 Application**

- Prospective applicants apply directly to the Department of Maritime Studies.
- Closing date for application is the 30th September.

### **5.2.3 Duration of Programme Offerings**

DUT Rules G21(C)(2) and (3) apply.

### **5.2.4 Eligibility for Exams**

DUT Rule G12 shall apply.

### **5.2.5 Promotion to a Higher Level/ Progression Rules**

DUT Rule G16 shall apply to this qualification.

### **5.2.6 Assessment Rules**

- A student who, for any valid reason, is absent from a class test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days to be considered for a special assessment.
- A special assessment shall be set by the department for students who have missed a coursework assessment. 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.
- A student shall comply with the assignment submission dates contained in the relevant Study Guides. Assignments shall be handed to the module lecturer.
- Late submission of assignments shall be penalised.
- A student must refer to the Study Guides for details relating to the number and type of assessments, and the calculation of course, examination and final marks.
- To avoid disciplinary proceedings against them, a student must be fully acquainted and shall comply with DUT Rule 13(1)(p) at each test/examination session.

### **5.2.7 Academic Integrity**

DUT Rule G13 (o) shall apply to this qualification.

### **5.2.8 General Departmental Rules**

A student registered at the department shall, at all times, comply with the Student Code of Conduct outlined in the DUT General Handbook.

### 5.3. Programme Rules

#### 5.3.1 Minimum Entry Requirement

No person shall be registered for the qualification unless that person is in possession of the following:

- National Diploma in Maritime Studies or recognised equivalent
- Diploma in Nautical Studies or a recognized equivalent.

#### 5.3.2 Unsatisfactory Academic Progress

The DUT Rules G17 and G21C (3) shall apply to this qualification. In addition, a student who fails two modules in the first semester with a final mark of less than 40% in each module is not permitted to reregister in this qualification.

#### 5.3.3 Interruption of Studies

The DUT General Rule pertaining to interruption of studies will apply. The student will therefore need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge prior to being given permission to continue with the registration. An assessment will be used to prove currency of appropriate knowledge.

## 6 DIPLOMA: SHIPPING AND LOGISTICS (DISHLI)

### 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.

### 6.1 PROGRAMME STRUCTURE (DISHLI)

Code	Modules	Core Fundamental Elective	Assessment	Semester of Study	HEMIS Credits	Pre-requisite Modules
ECNC101	Economics (Micro)	F	EX	1A	0.100	
ISTS101	Introduction to Statistics	F	CA	1A	0.100	
CMIL101	Computer Skills and Information Literacy	F	CA	1A	0.100	
CMSS101	Communication Skills	F	CA	1A	0.100	
CSTN101	IGE: DUT Cornerstone 101	F	CA	1A	0.100	
ECNC201	Economics (Macro)	F	EX	1B	0.100	Economics (Micro)
STSC101	Statistics I	F	CA	1B	0.100	Introduction to Statistics
ISHP101	Introduction to Shipping	C	CA	1B	0.133	
CLHR101	Choice of 1 of the following electives (IGE): • IGE: Constitutional Law and Human Rights	E	CA	1B	0.067	
CLDV101	• IGE: Cultural Diversity					
VNVL101	• IGE: Violence and Non-Violence					
IASC101	FGE: Introduction to Applied Sciences	F	CA	1B	0.100	
SHLP101	Shipping and Legal Practice I	C	EX	2A	0.067	Introduction to Shipping
LGTS101	Logistics I	C	EX	2A	0.100	

BSMT101	Business and Management 1	C	EX	2A	0.100	
PTMN101	Port and Terminal Management 1	C	EX	2A	0.100	
GENV101	Choice of 1 of the following electives (IGE): • IGE: The Global Environment	E	CA	2A	0.067	
HCDK101	• IGE: HIV and Communicable Diseases in KZN					
SHLP201	Shipping and Legal Practice 2	C	EX	2B	0.100	Shipping and Legal
LGTS201	Logistics 2	C	EX	2B	0.100	Logistics 1
BSMT201	Business and Management 2	C	EX	2B	0.100	Business and Management
PTMN201	Port and Terminal Management 2	C	EX	2B	0.100	Port and Terminal Management 1
ASWL101	FGE: Applied Science and Wellness	F	CA	2B	0.100	
SHLP301 #	Shipping and Legal Practice 3	C	EX	3A	0.100	Shipping and Legal
LGTS301 #	Logistics 3	C	EX	3A	0.100	Logistics 2
BSMT301 #	Business and Management 3	C	EX	3A	0.067	Business and Management
PTMN301 #	Port and Terminal Management 3	C	EX	3A	0.067	Port and Terminal Management 2
EQDV101	Choice of 1 of the following electives (IGE): • IGE: Equality and Diversity	E	CA	3A	0.067	
TENE101	• IGE: The Entrepreneurial Edge					
RASS101	Choice of 1 of the following electives (FGE): • FGE: Applied Sciences and Society	E	CA	3A	0.100	
ASES101	• FGE: Applied Sciences for Environment Sustainability					
ASCE101	• FGE: Applied Sciences and Community Engagement					
MSWP101	Maritime Shore-based Work Practice	C	CA	3B	0.500	Refer to 6.2.4

KEY: All subjects are compulsory.

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

Year of Study: S1 to S6 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 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(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.

### 6.2.2 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.

### 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 5.3.9 below.

### 6.2.4 Work Integrated Learning (WIL)

This programme requires the student to undergo a 6-month period of Work

Integrated Learning (WIL) during study period 6. The student must pass a minimum of 3 core modules in study period 5 to be eligible for WIL placement. However, preference will be given to students who have completed all modules.

During the shore-based period the student is to complete a logbook under the supervision of a training manager/supervisor and is obliged to submit quarterly reports, including final report to the Department, which must be signed by the training manager/supervisor. 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
MSWPI01	Maritime Shore-based Work Practice

Refer to Programme Rule 6.3.11 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 module 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 module (a module 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.

### 6.2.6 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.

## 6.3 PROGRAMME RULES

### 6.3.1 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:-

#### 6.3.1.1 Academic Achievement

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

- 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

<b>Compulsory Subject</b>	<b>HG</b>	<b>SG</b>
English	E	D
Mathematics	E	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.

<b>Compulsory Subject</b>	<b>Minimum</b>
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:

<b>Compulsory Subject</b>	<b>NSC Rating</b>
English	4
Mathematics	3

### **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.

### **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.

### **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.

### **6.3.2 Selection Criteria**

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.



### **6.3.3 Pass Requirements**

The DUT Rules G12, G14 and G15 apply.

### **6.3.4 Reregistration Rules**

The DUT Rule G16 applies.

### **6.3.4 Exclusion Rules**

In addition to DUT Rule G17, a first-year student who fails 50% plus one of the 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 G6A.

### **6.3.6 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.

### **6.3.7 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:

#### **6.3.7.1 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.

#### **6.3.7.2 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.

### **6.3.8 Attendance and Assessment**

6.3.8.1 A student who, for any valid reason (Refer to Programme Rule 6.3.8.2 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.

6.3.8.2 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.

### 6.3.9 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.

### 6.3.10 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

### 6.3.11 Work Integrated Learning Rules

The DUT Rule G28 applies.

## 7. ADVANCED DIPLOMA IN SHIPPING AND LOGISTICS (ADSHLI)

The Advanced Diploma in Shipping and Logistics provides students with intensive, focused and applied specialisation. It equips students with the knowledge and skills required to broaden the scope of their function in the international shipping and logistics environment.

### 7.1 PROGRAMME STRUCTURE (ADSHLI)

Code	Modules	Common / Specialised	Assessment	Semester of Study	HEMIS Credits	Prerequisite Modules
CHSM101	Container Shipping Management	C	EX	S1	0.200	
GLMD101	Global Maritime Domain	C	EX	S1	0.200	
SHBM101	Shipping Business Management	C	EX	S1	0.100	
CTMNI01	Container Terminal Management	C	EX	S2	0.200	
FMNG101	Financial Management	C	EX	S2	0.200	
LSCM101	Logistics and Supply Chain Management	C	EX	S2	0.100	

### 7.2 PROGRAMME INFORMATION

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

#### 7.2.1 Suitable Candidate Selection

In addition to the Minimum Admission Requirements, the following selection process will determine placement in the qualification:

- Selection into the qualification is based on the student's academic performance in the National Diploma in Maritime Studies or Diploma in Shipping and Logistics or a recognised equivalent.
- and / or appropriate work experience, and
- a ranking system will be used.

#### 7.2.2 Application

Prospective applicants apply directly to the Department of Maritime Studies. Closing date for application is the 30<sup>th</sup> September.

#### 7.2.3 Suitable Candidate Selection

DUT Rules G21(C)(2) and (3) apply.

#### **7.2.4 Eligibility for Exams**

DUT Rule G12 shall apply.

#### **7.2.5 Promotion to a Higher Level/ Progression Rules**

DUT Rule G16 shall apply to this qualification.

#### **7.2.6 Assessment Rules**

- A student who, for any valid reason, is absent from a class test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days to be considered for a special assessment.
- A special assessment shall be set by the department for students who have missed a coursework assessment. 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.
- A student shall comply with the assignment submission dates contained in the relevant Study Guides. Assignments shall be handed to the module lecturer.
- Late submission of assignments shall be penalised.
- A student must refer to the Study Guides for details relating to the number and type of assessments, and the calculation of course, examination and final marks.
- To avoid disciplinary proceedings against them, a student must be fully acquainted and shall comply with DUT Rule 13(1)(p) at each test/examination session.

#### **7.2.7. Academic Integrity**

DUT Rule G13 (o) shall apply to this qualification.

#### **7.2.8. General Department Rules**

A student registered at the department shall, at all times, comply with the Student Code of Conduct outlined in the DUT General Handbook.

### **7.3. PROGRAMME RULES**

#### **7.3.1. Minimum Entry Requirement:**

No person shall be registered for the qualification unless that person is in possession of the following:

- National Diploma in Maritime Studies or recognised equivalent
- Diploma in Shipping and Logistics or a recognized equivalent.

#### **7.3.2. Unsatisfactory Academic Progress**

The DUT Rules G17 and G21C (3) shall apply to this qualification. In addition, a

student who fails two modules in the first semester with a final mark of less than 40% in each module is not permitted to reregister in this qualification.

### 7.3.3. Interruption of Studies

The DUT General Rule pertaining to interruption of studies will apply. The student will therefore need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge prior to being given permission to continue with the registration. An assessment will be used to prove currency of appropriate knowledge.

## 9. 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

## 8.1 PROGRAMME STRUCTURE (3YEAR) (NDMTSI)

Code	Modules	Common / Specialised	Assessment	Semester of Study	HEMIS Credits	Pre-requisite Modules
MSCI102	Marine Science I	C	Ex	S1	0.083	
INML101	Introduction to Marine Law I	C	Ex	S1	0.042	
CSKI103	Communication Skills I	C	CA	S1	0.042	
CSER101	Computer Skills I	C	CA	S1	0.041	
MRMT101	Marine Mathematics I	C	CA	S1	0.083	
STRN101	Sea Transport I	C	CA	S1	0.083	
PRNV101	Principles of Navigation I	S	Ex	S1	0.083	
NISY102	Navigation Information Systems I	S	CA	S1	0.042	
STRN201	Sea Transport II	C	Ex	S2	0.083	STRN101
MALW101	Marine Law I	C	CA	S2	0.083	INML101
MEST202	Marine Environmental Studies II	S	Ex	S2	0.083	MSCI102
NARC101	Naval Architecture I	S	Ex	S2	0.083	MRMT101 + MSCI102
NAVGI12	Navigation I (Theory) Module 1	S	Ex	S2	0.083	MRMT101 + PRNV101
NAVGI22	Navigation I (Chartwork) Module 2	S	Ex	S2	0.084	MRMT101 + PRNV101
NISY202	Navigation Information Systems II	S	CA	S2	0.083	NISY102
MALW201	Marine Law II	C	Ex	S3	0.125	MALW201
STRN302#	Sea Transport II	C	Ex	S3	0.125	STRN201
NARC203	Naval Architecture II	S	Ex	S3	0.167	NARC101
NAVIG202	Navigation II	S	Ex	S3	0.167	NAVIG101
NISY312	Navigation Information Systems III (Mod 1)	S	Ex	S3	0.167	NISY202
MEST302#	Marine Environmental Studies III	S	Ex	S3	0.167	MEST202
MALW301#	Marine Law III	C	Ex	S4	0.250	MALW201
NARC303#	Naval Architecture III	S	Ex	S4	0.250	NARC203
NAVIG302#	Navigation III	S	Ex	S4	0.248	NAVIG202
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.

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.

## **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 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 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/student 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/student in obtaining suitable experiential learning placement, the onus is on the student/student 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 logbook 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 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 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 penalized.

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 8.3.9 below.

### **8.2.6 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.

### **8.2.7 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.

### **8.2.8 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 student 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 students holding a pass from an accredited training institution in S3 and S4 will be eligible to be examined for the Chief Mate Certificate."

### **8.3. PROGRAMME RULES**

#### **8.3.1. Minimum Admission Requirements**

##### **8.3.1.1 Academic Achievement**

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

##### **8.3.1.2 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)*

##### **8.3.1.3 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)*

##### **8.3.1.4 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)*

#### **8.3.2 Selection Criteria**

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

#### **8.3.3. Pass Requirements**

In addition to the DUT Rules G12, G14 and G15, the following programme rules apply: 8.3.3.1 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

#### **8.3.4. 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:-

##### **8.3.4.1 Promotion from Semester 1 to Semester 2:**

Students must pass a minimum of 3 subjects.

##### **8.3.4.2 Promotion from Semester 2 to Semester 3:**

Students must pass all prerequisite subjects.

##### **8.3.4.3 Promotion from Semester 3 to Semester 4:**

Students must pass a minimum of 3 full subjects.

#### **8.3.5. 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)*

### **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.

### **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.

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

### **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*

### 8.3.9 Attendance and Assessment

8.3.9.1 A student who, for any valid reason (Refer to Programme Rule 8.3.9.2 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)

### 8.3.9.3 Health and Safety

Students must adhere to all Health and Safety regulations both while at DUT and in VWL 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)

## II. 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.

### 9.1. PROGRAMME STRUCTURE (4YEAR)

Code	Modules	Common / Specialised	Assessment	Semester of Study	HEMIS Credits	Pre-requisite Modules
ASMT101	Applied Science (Mathematics)	C	Ex	Year I	0.175	
ASPY101	Applied Science (Physics)	C	Ex	Year I	0.175	
CSIL101	Computer Skills and Information Literacy	C	CA	Year I	0.175	
CSIS101	Communication Skills and Introduction to Shipping	C	CA	Year I	0.175	
PRNV101	Principles of Navigation I	S	Ex	2a	0.100	
IMLA101	Introduction to Marine Law I (Augmented)	S	Ex	2a	0.166	
STRN101	Sea Transport I	C	CA	2a	0.100	
NISY102	Navigation Information Systems I	C	CA	2a	0.100	
STRN201	Sea Transport II	C	Ex	S2/ 2b	0.166	STRN101
MALW101	Marine Law I	C	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	ASPY101 + ASMT101
NVGN111	Navigation I (Theory) Module I (Augmented)	S	Ex	S2 / 2b	0.166	PRNV101 + ASMT101
NVGN121	Navigation I (Chartwork) Module 2 (Augmented)	S	Ex	S2 / 2b	0.100	PRNV101 + ASMT101
NISY202	Navigation Information Systems II	S	CA	S2 / 2b	0.100	NISY102
MALW201	Marine Law II	C	Ex	S3 / 3a	0.0091	MALW101
STRN302#	Sea Transport II	C	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	NVGN101
NISY312	Navigation Information Systems III (Mod 1)	S	Ex	S3 / 3a	0.0091	NISY202
MEST302#	Marine Environmental Studies III	S	Ex	S3 / 3a	0.0091	MEST202
MALW301#	Marine Law III	C	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		

KEY: All subjects are compulsory.

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.

## 9.2. PROGRAMME INFORMATION

Refer to 8.2 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.

## 9.3. PROGRAMME RULES

Refer to 8.3 Programme Rules under the ND: Maritime Studies (Navigation) and the following rules which apply specifically to ND: Maritime Studies (Navigation) (ECP).

### 9.3.1. Minimum Admission Requirements

Refer to Rule 8.3.1 which is applicable to both the ND and ND(ECP).

### 9.3.2. Selection Criteria

Refer to Rule 8.3.2 which is applicable to both the ND and ND(ECP).

### 9.3.3. Pass Requirements

Refer to Rule 8.3.3 which is applicable to both the ND and ND(ECP).

### 9.3.4. Reregistration Rules in the Extended Curriculum Programme

In addition to the DUT Rule G16, and all prerequisite subjects as identified in the Learning Table Structure (9.1), the following programme rules apply:-

#### 9.3.4.1 Promotion from Year 1 to 2a

Students must pass a minimum of 3 subjects.

**9.3.4.2 Promotion from Semester 2a to Semester 2b:**

Students must pass a minimum of 3 subjects

**9.3.4.3 Promotion from Semester 2b to Semester 3a:**

Students must pass a minimum of 3 subjects

**9.3.4.4 Promotion from Semester 3a to Semester 3b:**

Students must pass a minimum of 3 subjects

**9.3.5. Exclusion Rules**

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

**9.3.6. 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)*

**9.3.7. Work Integrated Learning Rules**

Refer to Rule 8.3.7 which is applicable to both the ND and ND(ECP).

**9.3.8. Code of Conduct**

Refer to Rule 8.3.8 which is applicable to both the ND and ND(ECP).

**9.3.9. Attendance and Assessment**

Refer to Rule 8.3.9 which is applicable to both the ND and ND(ECP).

**9.3.10. Health and Safety**

Refer to Rule 8.3.10 which is applicable to both the ND and ND(ECP)

## 12. 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.

### 10.1. PROGRAMME STRUCTURE (3 YEAR)

Code	Modules	Common / Specialised	Assessment	Semester of Study	HEMIS Credits	Pre-requisite Modules
MSCI102	Marine Science I	C	Ex	S1	0.083	
INML101	Introduction to Marine Law I	C	Ex	S1	0.042	
CSKI103	Communication Skills I	C	CA	S1	0.042	
CSER101	Computer Skills I	C	CA	S1	0.041	
MRMT101	Marine Mathematics I	C	CA	S1	0.083	
STRN101	Sea Transport I	C	CA	S1	0.083	
PECN101	Principles of Economics	S	Ex	S1	0.083	
CMRL111	Commercial Law (Mod 1)	S	Ex	S1	0.083	
STRN201	Sea Transport II	C	Ex	S2	0.083	STRN101
MALW101	Marine Law I	C	CA	S2	0.083	INML101
CMRL121	Commercial Law (Mod 2)	S	Ex	S2	0.125	CMRL111
ECST101	Economics of Sea Transport I	S	CA	S2	0.083	STRN101 + PECN101
SHAD101	Shipping Administration I	S	CA	S2	0.125	STRN101
BAFI102	Business Admin: Financial	S	Ex	S2	0.125	
MALW201	Marine Law II	C	Ex	S3	0.125	MALW201
STRN302#	Sea Transport III	C	Ex	S3	0.125	STRN201
AMNM111	Administration Management (Mod 1)	S	Ex	S3	0.167	
ECST201	Economics of Sea Transport II	S	CA	S3	0.167	ECST101
BAMN202	Business Admin: Management II	S	Ex	S3	0.125	CSKI101
SADM202	Shipping Administration II	S	Ex	S3	0.167	SHAD101
MALW301#	Marine Law III	C	Ex	S4	0.250	MALW201
AMNM121	Administration Management (Mod 2)	S	Ex	S4	0.210	AMNM111
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		

KEY: All subjects are compulsory.

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.

## **10.2. PROGRAMME INFORMATION**

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

### **10.2.1 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.

### **10.2.2 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.

### **10.2.3 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.

### **10.2.4 Work Integrated Learning (WIL)**

This programme requires the student/student 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/student in obtaining suitable experiential learning placement, the onus is on the student/student 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:

<b>Register Code</b>	<b>Subject</b>
MPSB201	Maritime Practice (Shore-based)

Refer to Programme Rule 8.3.7 below.

### **10.2.5 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 penalized.

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.

### **10.2.6 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.

## **10.3. PROGRAMME RULES**

### **10.3.1 Minimum Admission Requirements**

#### **10.3.1.1 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)

#### **10.3.1.2 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)

#### **10.3.1.3 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)

### **10.3.2 Selection Criteria**

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

### **10.3.3 Pass Requirements**

The DUT Rules G12, G14 and G15 apply.

### **10.3.4. 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:-

- 10.3.3.1 Promotion from Semester 1 to Semester 2:  
Students must pass a minimum of 3 subjects.
- 10.3.3.2 Promotion from Semester 2 to Semester 3:  
Students must pass all prerequisite subjects.
- 10.3.3.3 Promotion from Semester 3 to Semester 4:                 Students  
must pass a minimum of 3 full subjects.  
(Approved by Senate Rules Comm wef 2014/10)

### **10.3.5.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)

### **10.3.6.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)

### **10.3.7. 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)

### **10.3.8.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:

#### **10.3.8.1 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)

### 10.3.8.2 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)

### 10.3.9 Attendance and Assessment

10.3.9.1 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)

10.3.9.2 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)

### 10.3.10 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)

## II ADVANCED DIPLOMA IN MARINE ENGINEERING (ADMREI)

### Purpose of Qualification

This programme is a specialisation to Mechanical Engineering qualification. To enter this programme a student must possess a Mechanical Engineering Diploma or Degree with the requirements of the SAMSA Code for the relevant Certificate of Competency. This code can be found on [www.samsa.org.za](http://www.samsa.org.za). Applications can be made to the nearest SAMSA office.

### II.1. PROGRAMME STRUCTURE (1 YEAR)

Code	Modules	Common / Specialised	Assessment	Semester of Study	HEMIS Credits	Prerequisite Modules
NAAR401	Naval Architecture I	C	EX	S1	0.100	
MEKN401	Marine Engineering Knowledge I	C	EX	S1	0.200	
MASU401	Marine Surveying	C	EX	S1	0.200	
NAAR402	Naval Architecture II	C	EX	S2	0.133	NAAR401
MEKN402	Marine Engineering Knowledge II	C	EX	S2	0.200	MEKN401
LEKN401	Legal Knowledge I	C	EX	S2	0.167	

Note: There are no prerequisite modules for S1 except that candidate must be in possession of a valid Mechanical Engineering qualification before registering.

By completing these subjects; NAAR401, MEKN401, NAAR402, MEKN402 and LEKN401, a student will meet the requirements for the

theoretical component for a Certificate of Competency as a Marine Engineer Watch-keeper.

## **11.2 PROGRAMME INFORMATION**

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

### **11.2.1 Suitable Candidate Selection**

In addition to the Minimum Admission Requirements, the following selection process will determine placement in the qualification:

- Selection into the qualification is based on the student's academic performance in the Diploma or Degree in Mechanical Engineering or recognised equivalent.
- and / or appropriate work experience, and
- a ranking system will be used.

### **11.2.2 Application**

Prospective applicants apply directly to the Department of Maritime Studies. Closing date for application is the 30<sup>th</sup> September.

### **11.2.3 Suitable Candidate Selection**

DUT Rules G21(C)(2) and (3) apply.

### **11.2.4 Eligibility for Exams**

DUT Rule G12 shall apply.

### **11.2.5 Promotion to a Higher Level/ Progression Rules**

DUT Rule G16 shall apply to this qualification.

### **11.2.6 Assessment Rules**

- A student who, for any valid reason, is absent from a class test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days to be considered for a special assessment.
- A special assessment shall be set by the department for students who have missed a coursework assessment. 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.
- A student shall comply with the assignment submission dates contained in the relevant Study Guides. Assignments shall be handed to the module lecturer.
- Late submission of assignments shall be penalised.
- A student must refer to the Study Guides for details relating to the number and type of assessments, and the calculation of course, examination and final marks.

- To avoid disciplinary proceedings against them, a student must be fully acquainted and shall comply with DUT Rule 13(1)(p) at each test/examination session.

### **11.2.7.Academic Integrity**

DUT Rule G13 (o) shall apply to this qualification.

### **11.2.8.General Department Rules**

A student registered at the department shall, at all times, comply with the Student Code of Conduct outlined in the DUT General Handbook.

## **11.3.PROGRAMME RULES**

### **11.3.1.Minimum Entry Requirement:**

No person shall be registered for the qualification unless that person is in possession of the following:

- Diploma in Mechanical Engineering or recognised equivalent
- Degree in Mechanical Engineering or a recognized equivalent.

### **11.3.2.Unsatisfactory Academic Progress**

The DUT Rules G17 and G21C (3) shall apply to this qualification. In addition, a student who fails two modules in the first semester with a final mark of less than 40% in each module is not permitted to reregister in this qualification.

### **11.3.3.Interruption of Studies**

The DUT General Rule pertaining to interruption of studies will apply. The student will therefore need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge prior to being given permission to continue with the registration. An assessment will be used to prove currency of appropriate knowledge.

## **12 POSTGRADUATE DIPLOMA IN INTERNATIONAL SHIPPING (PDISHI)**

### **Purpose of Qualification**

This programme provides a broader base of shipping for candidates coming from different directions within the maritime industry including seagoing and shore based.

### **12.1. PROGRAMME STRUCTURE (1 YEAR)**

Code	Modules	Core Fundamental Elective	Assessment	Semester of Study	HEMIS Credits	Pre-requisite Modules
REME501	Research Methodology	C	EX	S1	0.167	
MAIN501	Marine Insurance	C	EX	S1	0.166	
SCAB501	Ship Chartering	C	EX	S1	0.166	
CODC501	Carriage of Dangerous Cargoes	C	EX	S2	0.167	
RSPR501	Research Project	C	EX	S2	0.167	

MACI501 ALAJ501 MELA501	<b>Choice of 1 of the following electives:</b> Marine Accident Investigation Admiralty Law and Jurisdiction Marine Environmental Law	E	EX	S2	0.167	
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Note: There are no prerequisite modules for this programme except that candidates must be in possession of a valid Advanced Diploma or equivalent qualification before registering.

## 12.2 PROGRAMME INFORMATION

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

### 12.2.1 Suitable Candidate Selection

In addition to the Minimum Admission Requirements, the following selection process will determine placement in the qualification:

- Selection into the qualification is based on the student's academic performance in the Advanced Diploma in Nautical Studies, Shipping and Logistics or Marine Mechanical Engineering or recognised equivalent.
- Selection into the qualification is based on the number of places in the programme.
- and / or appropriate work experience, and
- Students will be ranked on academic performance.

### 12.2.2 Application

Prospective applicants apply directly to the Department of Maritime Studies.  
Closing date for application is the 30<sup>th</sup> September.

### 12.2.3 Suitable Candidate Selection

DUT Rules G21(C)(2) and (3) apply.

### 12.2.4 Eligibility for Exams

DUT Rule G12 shall applies.

### 12.2.5 Promotion to a Higher Level/ Progression Rules

DUT Rule G16 shall apply to this qualification.

### 12.2.6 Assessment Rules

- A student who, for any valid reason, is absent from a class test, must provide written proof of the reason for the absence to the lecturer concerned, within five (5) working days to be considered for a special assessment.
- A special assessment shall be set by the department for students who have missed a coursework assessment. 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.
- A student shall comply with the assignment submission dates contained in the relevant Study Guides. Assignments shall be handed to the module lecturer.

- Late submission of assignments shall be penalised.
- A student must refer to the Study Guides for details relating to the number and type of assessments, and the calculation of course, examination and final marks.
- To avoid disciplinary proceedings against them, a student must be fully acquainted and shall comply with DUT Rule 13(1)(p) at each test/examination session.

### **12.2.7.Academic Integrity**

DUT Rule G13 (o) shall apply to this qualification.

### **12.2.8.General Department Rules**

A student registered at the department shall, always, comply with the Student Code of Conduct outlined in the DUT General Handbook.

## **12.3.PROGRAMME RULES**

### **12.3.1.Minimum Entry Requirement:**

No person shall be registered for the qualification unless that person is in possession of the following:

- Advanced Diploma in Nautical Studies
- Advanced Diploma in Shipping and Logistics
- Advanced Diploma in Marine Engineering
- A recognised equivalent qualification

### **12.3.2.Unsatisfactory Academic Progress**

The DUT Rules G17 and G21C (3) shall apply to this qualification. In addition, a student who fails two modules in the first semester with a final mark of less than 40% in each module is not permitted to reregister in this qualification.

### **12.3.3.Interruption of Studies**

The DUT General Rule pertaining to interruption of studies will apply. The student will therefore need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge prior to being given permission to continue with the registration. An assessment will be used to prove currency of appropriate knowledge.

## **13. SERVICED MODULES**

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 Studies	Department of Physics	Marine Science I, II	MRSN101 MRSN201

	Department of Mathematics	Marine Mathematics I, II	MRNM101 MRNM201
	Department of Information Technology	Computer Skills and Information Literacy	CSIL101
	General Education Modules - TBA	DUT Cornerstone 101	CSTN101
		IGE: Leadership	LDSH101
		IGE: The Global Environment	GENV101
		IGE: The Entrepreneurial Edge	TENE101
		IGE: Values in the Workplace	VWKP101
		IGE: Violence and Non-Violence	VNVL101
		FGE: Applied Sciences and Society	APSS101
		FGE: Applied Science and Wellness	ASWL101
Dip: Shipping and Logistics	Department of English and Communications	Communication Skills I	CMSS101
	Department of Applied Law	Shipping and Legal Practice 1	SHLP101
		Shipping and Legal Practice 2	SHLP201
	Department of Information Technology	Computer Skills and Information Literacy	CSIL101
	Department of Economics and Governance	Economics (Micro)	ECNC101
		Economics (Macro)	ECNC201
	Department of Management and Entrepreneurial Studies	Business and Management 1	BSMT101
		Business and Management 2	BSMT201
	Department of Statistics	Introduction to Statistics	ISTS101
		Statistics I	STSC101
	General Education Modules - TBA	IGE: DUT Cornerstone 101	CSTN101
		IGE: Constitutional Law and Human Rights	CLHR101
		IGE: Cultural Diversity	CLDV101
		IGE: Entrepreneurial Edge,	TENE101
		IGE: Equality and Diversity	EQDV101
		IGE: Global Environment, the	GENV101
		IGE: HIV and Communicable Diseases in KZN	HCDK101
		IGE: Leadership	LDSH101
		IGE: Violence and Non-Violence	VNVL101
		FGE: Introduction to Applied Sciences	IASC101
		FGE: Applied Science and Society	APSS101
		FGE: Applied Science and Wellness	ASWL101
		FGE: Applied Science for Environmental Sustainability	ASES101
		FGE: Community Engagement and Development	ASCE101

#### 14. SHORT COURSES

The following non-subsidised short courses are provided. The scheduled dates and costs per student are available from the Centre for Continuing Education (CCPE)

<b>Name of Short Course</b>	<b>Approved for Offering</b>	<b>Duration</b>
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
Human Elements in Leadership & Management (HELM) (Maritime)	FB 2014/10	Duration 5 days
Maritime Communications	2008/02	Duration 5 days
Fundamentals of Shipping		Duration 5 days
Imports and Exports		Duration 5 days
Contract of Carriage by Sea		Duration 5 days

For additional information on short courses, contact Ms. Philiswa Dlamini (0313736016) or [philiswad@dut.ac.za](mailto:philiswad@dut.ac.za)

## **15. MODULE 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

### **15.1. DIPLOMA IN NAUTICAL STUDIES COMMUNICATION SKILLS**

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

Hours of tuition: Theory: 4 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: 1 period per week

Syllabus: Word processing, spreadsheets, power-point, e-mail, internet, search engines, academic databases

### **INTRODUCTION TO SHIPBOARD OPERATIONS**

Assessment: Continuous assessment based on 2 class tests and an assignment

Hours of tuition: Theory: 4 x periods per week

Syllabus: South African legal system; criminal and civil law; international law, codes and conventions; company and shipboard management structures

### **MARINE ENGINEERING SYSTEMS I**

Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 x periods per week

Syllabus: Diesel plant, Steam turbine plant, Gas turbine plant, Transmission of power to propulsion systems, Fuel consumption, Auxiliary boilers, Pumps, Freshwater systems, Ventilation, Stabilisers, Steering and manoeuvring systems, Data loggers, Mimic boards, Analogue and digital displays, Bridge control, Fuel consumption, Resistance

### **MARINE MATHEMATICS I**

Assessment: Continuous assessment based on 4 class tests

Hours of tuition: Theory: 4 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: 4 x periods per week.

Syllabus: Mensuration, spherical triangles, vectors, ellipses



## **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: 4 x periods per week  
Practical: 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: 4 x periods per week  
Practical: 2 x periods per week
- Syllabus: Temperature; expansion of solids and fluids; gas laws; waves; electromagnetic radiation; light and sound.

## **NAVIGATION CALCULATIONS I**

- Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper
- Hours of tuition: Theory: 4 x periods per week
- Syllabus: Latitude and longitude, Kepler's Laws, equation of time, marine sextant errors, marine chronometer, and errors, Universal Time Coordinated, time systems, solar system, celestial sphere and PZX navigation triangle, phases of the moon, chart projections, parallel sailing, meridian sailing, plane sailing, Mercator sailing, great circle sailing, composite circle sailing, high tide, low tide, standard ports, secondary ports, tide tables

## **NAVIGATION CALCULATIONS 2**

- Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper
- Hours of tuition: Theory: 4 x periods per week
- Syllabus: Nautical Almanac, GHA, LHA, SHA and Declination, azimuth calculations (ABC method), amplitude calculations, Polaris's correction of sextant altitude to true altitude, latitude by meridian altitude, latitude by Polaris, relationship between position circles and position lines, Marc St Hilaire method of sight reduction, alternative methods of sight reduction, position line plotting, plan celestial observations at twilight, Nautical Publication (NP 323 – selected stars), star identifiers

## **NAVIGATION - SIMULATION (ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS)**

Assessment: Semester mark is calculated from the average of two tests and weekly simulator assessments

Hours of tuition: Theory: 2 x periods per week  
Practicals: 2 x periods per week

Syllabus: Legal aspects and requirements, Principal types of electronic charts, Navigational functions, and settings, ECDIS data, Presentation of ECDIS data, ECDIS Sensors, Route planning, Route monitoring, updating electronic charts, Documentation, Making ECDIS a safe tool for navigation

## **NAVIGATION – ELECTRONIC NAVIGATION SYSTEMS 1**

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.

## **NAVIGATION – ELECTRONIC NAVIGATION SYSTEMS 2**

Assessment: Semester mark is calculated from the average of two assessments. Examination consists of one two-hour paper.

Hours of tuition: Theory: 2 periods per week  
Practical: 2 periods per week

Syllabus: Radar and ARPA, COLREGS and radar plotting

## **NAVIGATION – ELECTRONIC NAVIGATION SYSTEMS 3**

Assessment: Semester mark is calculated from the average of two assessments. Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Ship's magnetic, gyro compass, evolution of shipboard navigation equipment, marine casualties

## **NAVIGATION: METEOROLOGY AND ENVIRONMENTAL MANAGEMENT I**

Assessment: Semester mark is calculated from the average of two assessments. Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Meteorology instruments, world meteorological organisation codes, weather services, meteorological processes, synoptic chart and effects of world shipping on climate change

## **NAVIGATION: METEOROLOGY AND ENVIRONMENTAL MANAGEMENT 2**

Assessment: Semester mark is calculated from the average of two assessments. Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: General circulation, main climatic zones, major global climate zones, surface oceanographic processes and data, passage planning, Tropical Revolving Storm

## **NAVIGATION – OCEAN AND COASTAL NAVIGATION I**

Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 x periods per week

Syllabus: Sailings on the earth's surface, types and properties of charts, carriage, storage, handling and maintenance of charts and nautical publications, weekly and cumulative lists of Notices to Mariners, plotting positions on a chart, chart symbols; true, compass and gyro courses, chartwork techniques to determine position

## **NAVIGATION – OCEAN AND COASTAL NAVIGATION 2**

Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 x periods per week

Syllabus: Ocean weather routing, presentation of meteorological and climatological data, publications and charts, principles of passage planning, ship reporting systems, documenting a passage plan, emergency / contingency procedures, ship handling, hydrodynamics, squat, bank effect, ship interaction

## **NAVIGATION - SIMULATION (RADAR AND ARPA AT OPERATIONAL LEVEL)**

Assessment: Semester mark is calculated from the average of two tests and weekly simulator assessments

Hours of tuition: Theory: 2 x periods per week  
Practicals: 2 x periods per week

Syllabus: Radar simulator controls, Internal communication, engine controls, signalling apparatus, telegraph systems, Bridge control system, Radar plotting, Collision avoidance, ARPA, Coastal Navigation, Passage planning and anchorage, Role of the Master, Advanced Radar plotting, Navigation and collision avoidance in all areas, Manoeuvring in all areas, Application and interpretation of the COLREGS, Application and interpretation of the IALA Buoyage system, Bridge watch keeping procedures, Communications between bridge and engine room, Factors which have effect on manoeuvres, turning circles and stopping distances including hydrodynamics, Manoeuvring a vessel in all conditions

## **SHIPBOARD MANAGEMENT I**

Assessment: Semester mark is calculated from the average of two assessments.  
Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Loading, stowage, carriage and unloading of dry cargoes, bulk liquid and chemical cargoes, duties of the Officer of the Watch

## **SHIPBOARD MANAGEMENT 2**

Assessment: Semester mark is calculated from the average of two assessments.  
Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Dry, liquid and dangerous cargoes, cargo calculations for break bulk, dry bulk and liquid bulk cargoes. Management theory

## **SHIPBOARD MANAGEMENT 3**

Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 x periods per week

Syllabus: Charter parties, Particular and general average, Maritime liens, Quality assurance, Codes and guidance, Requirements of MARPOL and SOLAS, STCW Convention, Load line convention, Health regulations, Taking command of a ship on unlimited voyage., Mandatory and voluntary ship reporting systems, Assisting vessels in distress, Classification societies, Maritime contracts of carriage, Maritime insurance, Commercial role and the legal responsibility of the master in vessel operations, including pilotage, Commercial role and the legal responsibilities and liabilities of the master in emergencies and incidents, Knowledge of organisations concerned with shipping, Legal procedures on arrival at and on departure from a port

## **SHIP STABILITY AND CONSTRUCTION I**

Assessment: Semester mark is calculated from the average of two assessments.  
Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Features of a ship's structure, ship stresses, hydrostatics, statical stability, GZ curves, transverse stability to list calculations, longitudinal stability

## **SHIP STABILITY AND CONSTRUCTION 2**

Assessment: Semester mark is calculated from the average of two assessments.  
Examination consists of one three-hour paper.

Hours of tuition: Theory: 4 periods per week

Syllabus: Structural requirements and features of a vessel, maintenance requirements, methods and procedures, dry-dock and surveys of hull, fittings and equipment, advanced stability calculations

## **SHIP STABILITY AND CONSTRUCTION 3**

Assessment: Semester mark is calculated from the average of two test  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 x periods per week

Syllabus: Cross-sectional view of double hull tankers, Torsion boxes, Fuel carriage in double bottoms, Design criteria for LNG Tankers, Protection provided to ship's hull, Survey requirements for special survey, inclining experiment, Wind heeling, Flooding of ship's compartments, second moment of irregular area, Load on a tank, heeling due to turning, Complex examples of loading, discharging, and shifting, Angle of loll

## **15.2. ADVANCED DIPLOMA IN NAUTICAL STUDIES FINANCIAL MANAGEMENT**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

Hours of tuition: Theory: 3 x periods per week

Syllabus: Financial and accounting terms, financial management issues  
system of accounts, financial statements, financial information  
budget, budgetary controls, planned expenditure and budgetary  
variations.

## **GLOBAL MARITIME DOMAIN**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

Hours of tuition: Theory: 5 x periods per week

Syllabus: Policies of international shipping organisations, environmental  
protection, occupational health and safety, risk management, finance  
and budget control, International maritime conventions, SOLAS –  
implications for design, efficiency and procedures, MARPOL 73/78 –  
implications for operation and maintenance of equipment, STCW –  
implications for human resource selection, training and management

MLC 2006 – implications for compliance and contemporary challenges facing shipping industry, economies of scale, efficiency and fatigue, stowaways, and migrants

## **MARINE ENVIRONMENTAL MANAGEMENT**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Causes and effects of pollution, Governance, regulations and enforcement, Air pollution and greenhouse gas emissions, Ballast water and other marine pollutants, Oil pollution, Offshore activities, measurement and management systems, legal issues, insurance and compensation

## **MARINE SURVEYING**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Structure of the maritime industry, classification societies, regulation with the industry, professional status and reputation, building client relationships, building client trust, client requirements, law of contract law of tort, Admiralty court of jurisdiction, charterparties, role of investigating states, role of interested states, mandatory standards, recommended practices, hull structural surveys, periodic surveys, safety and security survey

## **SAFETY, RISK AND SECURITY MANAGEMENT**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

**Hours of tuition:** Theory: 5 x periods per week

Syllabus: International Safety Management Code (ISM), International Ship Security and Port Facility Code (ISPS), operational safety management systems risk and quality management, risk assessment and reduction, contingency planning auditors, audit types, audit cycles, safety culture, safety climate, blame, no blame and just culture, safety leadership. investigation techniques, piracy versus terrorism, history and culture of piracy, cost to shipping, piracy hotspots

## **SHIPPING BUSINESS MANAGEMENT**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

Hours of tuition: Theory: 3 x periods per week

Syllabus: Overview of the shipping industry, management concepts, leadership concepts, international regulations, and conventions, obtaining and managing situational awareness, sources of data and information, communicating information, decision-making, influence of culture on decision-making, leading and managing teams, effective teamwork, practices of task and workload management

## **15.3. DIPLOMA IN SHIPPING AND LOGISTICS**

### **BUSINESS AND MANAGEMENT 1**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 periods per week

Syllabus: Management theory, organisational environments, multidisciplinary approach to business and management, Function and role of management, functional areas of shipping business organisations

### **BUSINESS AND MANAGEMENT 2**

Assessment : Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 periods per week

Syllabus: Internal elements of a business organisation, key external elements of a business organisation, diverse and dynamic nature of a business organisation, contemporary issues on international shipping

## **BUSINESS AND MANAGEMENT 3**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 periods per week

Syllabus: Globalisation, National differences in political economy, Differences in culture, Ethics in international business, international trade theory, Political economy of international trade. Foreign direct investment, Regional economic integration, foreign exchange market, International monetary system, Strategy of international business, Organisation of international business, Entry strategy and strategic alliances, Importing, exporting and countertrade, Global production, outsourcing and logistics, Global marketing and R&D, Global human resource management, Accounting in international business, financial management in international business, Macro-environment. Role of culture, Hofstede's cultural Cross-cultural issues – communication, Cross cultural issues – negotiating and decision making, Global issues – human resources, Global issues – leadership and motivation, Review strategy formulation and implementation in global context, Global alliances and strategy implementation, Strategy vs. structure and changing organisational structures

## **COMMUNICATION SKILLS**

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

Hours of tuition: Theory: 4 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: 1 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: 4 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: 4 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: 4 ~~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: 4 ~~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.

## **LOGISTICS I**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 ~~periods~~ per week

Syllabus: Principle's logistics, various parties involved in the logistics working environment, sustainability issues within the logistics environment, role of communication technology in context of logistics.

## **LOGISTICS 2**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 periods per week

Syllabus: International logistics market, customer service, communication, marketing

## **LOGISTICS 3**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper

Hours of tuition: Theory: 4 periods per week

Syllabus: Freight movements, Role of freight transport in society, Components of the freight, transport system, Market segments, Types of freight, Reasons for movement, Supply and demand characteristics, Modes of freight transport, Collection and distribution centres, Structure of the freight industry for different modes, geographically based structures, Sizes and types of organisations, Resources required for different modes, Types of costs, Profit consideration, Charges / tariffs / Rates, Volume discounts, Differential pricing, Sources of demand for freight transport, Types of service solutions, Opportunities and threats, Solution identification, Regular and non-regular services, Routes used, Route planning, Utilisation of resources, IT Systems, Collection, storage and distribution, Recording details, Tracking

vehicles, Measuring and recording operation, Reasons for regulations, Methods of regulation, Regulatory bodies, Enforcement bodies

## **MARITIME SHORE-BASED PRACTICE**

Assessment: Completion of logbook, Portfolio of Evidence, and presentation  
Hours of tuition: Not applicable – work integrated learning  
Syllabus: Ship's Agency, Clearing and Forwarding, Logistics, Port Management, Terminal Management, Documentation, Communication, Warehousing, Stevedoring, Ship types

## **PORT AND TERMINAL MANAGEMENT I**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Key concepts of port and terminal management, role of the various terminals within a port complex, various parties involved in the port and terminal working environment, sustainability issues within the port and terminal environment

## **PORT AND TERMINAL MANAGEMENT 2**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Role of ports in the 21<sup>st</sup> century, port equipment, types of port ownership, management of ports and terminals, legal aspects

## **PORT AND TERMINAL MANAGEMENT 3**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Port competition, Market information, Geographic location, Parties involved in transport operations, Techniques of port promotion, Nature and types of port charges, Cost factors in pricing, Pricing policy, Pricing structures, Regulatory mechanisms, Port development policy, Planning principles, Capacity calculations, Port layout and physical constraints, Financial management, Financial and commercial objectives, Corporate analysis of financial data, Project evaluation and review techniques, Joint venture opportunities

## **SHIPPING AND LEGAL PRACTICE I**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Systems of law and guidance at national and international level, commercial law, legal principles governing the sales of goods, buyer, and seller

## **SHIPPING AND LEGAL PRACTICE 2**

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

Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Legal principles governing supply of goods and services, Consumer Protection Act, trade descriptions and unfair commercial practices, agency, partnership, insurance contracts

### **SHIPPING AND LEGAL PRACTICE 3**

Assessment: Semester mark is calculated from the average of two assessments  
Examination consists of one three-hour paper  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Introduction to the law of international trade, INCOTERMS, Methods of financing international trade, Letters of credit, Voyage Charter parties, Time Charter parties, Bill of Lading, Demurrage, Despatch, Lay time, Hague Visby Rules, Hamburg Rules, Rotterdam Rules

### **STATISTICS I**

Assessment: Continuous assessment based on 2 tests and 1 assignment.  
Hours of tuition: Theory: 4 periods per week  
Syllabus: Purpose and methods of prediction and forecasting; scatter diagrams; linear regression; correlation; time series; software packages.

## **15.4. ADVANCED DIPLOMA IN SHIPPING AND LOGISTICS**

### **CONTAINER SHIPPING MANAGEMENT**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark  
Hours of tuition: Theory: 5 x periods per week  
Syllabus: Container shipping principles, trade routes; liner services; globalisation; container supply and demand; ship types, characteristics, sizes and tonnages, stowage planning; container types, classification, management, packing, securing, security; operating and voyage costs; capital and related costs; revenue components of freight rates; economics of world trade; alliances and consortia; conferences, discussion agreements, and stabilisation agreements; international and national organisations and entities; Regulations on pricing; documentation; legal aspects; INCOTERMS

### **CONTAINER TERMINAL MANAGEMENT**

Assessment: This is an examination module. There will be two assessments during

the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

Hours of tuition: Theory: 5 x periods per week

Syllabus: Containerization; port and terminal operations; the concept and rise of terminals; types and functions of container terminals; terminal ownership; demand for global container terminal capacity; infrastructure and layout of container terminals; terminal automation; differentiating terminal designs for specific trades; ship and quay operations; yard operations; gate operations CFS operations; container terminal resourcing; use of IT in container terminal operations; key performance indicators (KPIs) for terminal operations; health and safety (H&S) management in container terminals; IMDG Code, hazardous cargoes storage and contingency plans; identifying and avoiding risks of injury and accidents in terminals; security management in container terminals; managing the environment in container terminals

## **FINANCIAL MANAGEMENT**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark.

Hours of tuition: Theory: 3 x periods per week

Syllabus: Financial and accounting terms, financial management issues system of accounts, financial statements, financial information budget, budgetary controls, planned expenditure and budgetary variations.

## **GLOBAL MARITIME DOMAIN**

Assessment: This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

Hours of tuition: Theory: 5 x periods per week

Syllabus: Policies of international shipping organisations, environmental protection, occupational health and safety, risk management, finance and budget control, International maritime conventions, SOLAS –

implications for design, efficiency and procedures, MARPOL 73/78 –  
implications for operation and maintenance of equipment, STCW –  
implications for human resource selection, training and management  
MLC 2006 – implications for compliance and contemporary  
challenges facing shipping industry, economies of scale, efficiency and  
fatigue, stowaways, and migrants

## **LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Current supply chain strategies; customer services and logistics; channels of distribution; planning frameworks for logistics; inventory flow and supply chains; forms of inventory and their role; inventory as buffer islands in a supply chain; planning and forecasting; outsourcing operations and services; key drivers for outsourcing; outsourcing management; logistics risks and insurance; third and fourth party logistics solution; tailor-made contracts; tender process; negotiation techniques; global developments impacting the supply chain; logistics processes; logistics network planning; logistics and the environment; logistics and supply chain performance indicators; analytical performance and benchmarking techniques

## **SHIPPING BUSINESS MANAGEMENT**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

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

**Syllabus:** Overview of the shipping industry, management concepts, leadership concepts, international regulations, and conventions, obtaining and managing situational awareness, sources of data and information, communicating information, decision-making, influence of culture on decision-making, leading and managing teams, effective teamwork, practices of task and workload management

## **I 5.5. GENERAL EDUCATION MODULES APPLIED SCIENCE AND**

## SOCIETY

- Assessment: Continuous assessment based written assignment; presentations; tests; portfolio of evidence and project
- Hours of tuition: Theory: 4 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.

## APPLIED SCIENCE AND WELLNESS

- Assessment: Continuous assessment based on 1 test, 1 poster and 1 assignment
- Hours of tuition: Theory: 4 periods per week
- Syllabus: Global diet trends, exercise trends, nutritional status, physical activity output, macro-and micronutrients in health, meal and menu planning, lifestyle diseases, training programme structure

## APPLIED SCIENCE FOR SUSTAINABLE DEVELOPMENT

- Assessment: Semester mark is calculated from a class test, assignment, and group project
- Hours of tuition: Theory: 4 periods per week
- Syllabus: **Introduction to sustainable development:** Sustainable Development Goals (SDGs), Influence of Government Policy, business, communities, and individual, green living  
**Environmental Sustainability:** Pollution: air, water, and land; Climate change, global warming and CO<sub>2</sub> footprint, Conservation and biodiversity, Impact on health and wellness, Water resource management, Renewable energy  
**Food Security:** Availability of food resources for production and distribution, Poverty alleviation through subsistence farming, Utilization of food through enhanced nutritional profile and food safety, Access to food including affordability and food preferences

## COMMUNITY ENGAGEMENT AND DEVELOPMENT

- Assessment: Semester mark is calculated from a reflective journal, creative presentation, and practical project
- Hours of tuition: Theory: 4 periods per week
- Syllabus: **Introduction to the Applied Sciences, Community Engagement and Community Development:** multidisciplinary and multi-sectoral nature of community development and engagement; integration in line with the humanistic philosophy and ecosystems theory  
**Conceptual Framework:** Conceptualization of CE in its various forms; DUT conceptualisation of CE; purposes of and rationale for CE in the South African context (including the NDP); active and participatory citizenry; service and social action; social justice, change and transformation; students as change agents.  
**Ethics, principles and values for CE:** humanistic philosophy and Ubuntu; ethics and ethical conduct in relationship with communities. values that guide CE practice in the South African context; principles

that guide CE practice in the South African context.

**The Approaches and Process of CE:** dimensions of community (social, political, economic, cultural, physical) and community issues; reciprocity and partnerships; the integrated and holistic approach to education and life-relating discipline\faculty-based knowledge to real issues; stages (phases) of the CE process.

**Skills and Attributes for CE:** critical thinking; problem solving; communication skills (written and verbal-interviewing, active listening); interaction and human relationships; discipline specific skills; **attributes** (from character, love for self and humanity, creativity, curiosity for knowledge - discipline\faculty and self)

**Challenges and Benefits of CE:** Community, institution, faculty and students' perspectives

## **CONSTITUTIONAL LAW AND HUMAN RIGHTS**

Assessment: Continuous assessment based on 1 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 1 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.

## **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.

## **THE ENTRENEURIAL EDGE**

Assessment: Continuous assessment based on 2 tests and 1 assignment

Hours of tuition: Theory: 2 periods per week

Syllabus: Innovation, markets, risk, planning, fiancé, marketing, ethics and social responsibility

## **EQUALITY AND DIVERSITY**

Assessment: Semester mark is calculated from a class test, reflective assignment, group presentation and diversity festival

Hours of tuition: Theory: 2 periods per week

Syllabus: Concepts and terminology – e.g., diversity, equality, inclusion, power, oppression; Parameters of diversity as listed in section 9 of the SA Constitution, Prejudice, discrimination and inequality, The diversity competence continuum, Steps to develop competence/sensitivity in relation to diverse others, Selected topics

## **GLOBAL ENVIRONMENT**

Assessment: Continuous assessment based on a presentation and 2 assignments.  
Hours of tuition: Theory: 2 periods per week  
Syllabus: Environmental pollution, population growth vs. natural resources, climate change and global warming, sustainable development

## **HIV AND COMMUNICABLE DISEASES IN KZN**

Assessment: Continuous assessment based on e-learning activities, critical reflective diary, and community report  
Hours of tuition: Theory: 2 periods per week  
Syllabus: Epidemiology of HIV, TB and STI, HIV infection, transmission, and prevention. Psychological issues of HIV and TB, decision making and family autonomy, social isolation and stigma, disclosure

## **INTRODUCTION TO APPLIED SCIENCES**

Assessment: Continuous assessment based on written assignment; presentation; project; and class tests.  
Hours of tuition: Theory: 4 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.

## **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.



## **15.6. ADVANCED DIPLOMA IN MARINE ENGINEERING**

### **MARINE ENGINEERING KNOWLEDGE I**

**Assessment:** This is an examination module. There will be two assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be three hours closed book paper which will form 60% of the final mark

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Basic Firefighting Systems, Principle & Operation of Marine Pumps, Principle & Operation of Steering Systems, Principle & Operation of Boilers, Principle & Operation of Steam Turbine Systems, Basic Principle, Construction & Operation of ICE's, Control and Automation, Principle & Operation of Marine electrical system, Control of environmental pollution, Principle & Operation of Marine Refrigeration, Principle & Operation of Marine Sewage Plant.

### **NAVAL ARCHITECTURE I**

**Assessment:** There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

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

**Syllabus:** Structural Arrangements and Nomenclature, Constructional features of tankers, dry cargo ships, passenger ships, support vessels and specialist vessels, Distribution of Various Stresses on the Ship's Hull, Load-line Calculations, Centre of buoyancy, centre of gravity, initial transverse metacentre, righting lever, righting moment, metacentric height, Free surface and the dangers and effect at small angles of heel, True mean draught, longitudinal centre of flotation, longitudinal centre of gravity, longitudinal centre of buoyancy, trimming moment and moment to change trim 1 centimetre, Safety during dry docking and inspection of hull.

### **MARINE SURVEYING FOR ENGINEERS**

**Assessment:** There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form

60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Structure of the Ship building and repair, Classification societies, Mandatory standards and recommended practices, Hull structural surveys, Periodic surveys.

## **MARINE ENGINEERING KNOWLEDGE 2**

Assessment: There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Fire Fighting Systems, Power Generation / Distribution / Switchboard / Safety Systems and Interlocks / Emergency Systems, Various Steering Arrangements and their Safety, Marine Auxiliaries, Pump Characteristics and Troubleshooting, Treatment of Fuel Oil and Lube Oil, Effective Maintenance of Marine Diesel Engines, Steam Plants, Electrical Plants.

## **NAVAL ARCHITECTURE 2**

Assessment: There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 3 x periods per week

Syllabus: Structural requirements for vessels with respect to assignment of load lines and requirements for the construction of specialised vessels, Ship construction features and systems that may be used to limit flooding, Ship dry-docking requirements, ship plans, Loading, discharging, and shifting weights, effect on a vessel's transverse / longitudinal stability, Factors affecting GZ curves, Changes in stability at large angles of heel, Principles and procedures of the inclining test, Effect of damage and flooding on stability, Effect of turning on a vessel's stability, Relationship between resistance, speed and fuel consumption, Types of shipboard stresses, Shear force and bending moments curves for box-shaped vessels.

## **LEGAL KNOWLEDGE**

Assessment: There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will

require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Crew contractual obligations, Guidance and counselling, Shipboard discipline, Staff appraisal, Management theory, Merchant shipping legislation regarding employment law, Management of safety, Quality assurance, Codes and guidance, including SOLAS, MARPOL, ISM, ISPS and STCW, Safety culture and safety management systems, Requirements of MARPOL and SOLAS Requirements of STCW Convention for seafarers and marine industry in general, Health regulations, Knowledge of organisations concerned with shipping, South African legal system, Criminal and civil law including examples and procedures, Law of contract, tort (delict) and agency, Law of the sea, The formation of international law and how it becomes applicable to nationals of a country / flagged vessels, Flag and port state legislation and implementation of standards, Legal and non-legal regulations and compliance, Safety and quality legislation, including Maritime Occupational Safety Regulations and Code of Safe Working Practices for Merchant Seamen, Pollution and environmental legislation, Shipboard Marine Pollution Emergency Plans, Operational procedures and practices, Crew training and qualifications, Record keeping and providing evidence on occurrence of incidents, Company management structures, Shipboard management structures, Safe access.

## **15.7. POSTGRADUATE DIPLOMA IN INTERNATIONAL SHIPPING**

### **RESEARCH METHODOLOGY**

Assessment: This is a non-examination module. There will be three assessments during the semester taking the form of a class test, oral presentation, and research proposal.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Role of research in the maritime and related industries, Qualitative research methods, Quantitative research methods, Mixed research methods, Setting aims and objectives, Literature review, Secondary data collection, Primary data collection, interpreting data, Selecting samples, Data presentation, Research ethics.

### **SHIP CHARTERING AND BROKERING**

Assessment: This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The

examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Chartering alternatives, Chartering market practices, financial elements, Voyage estimation, Laytime counting and calculation, Ship sale and purchase, Tanker chartering, Containership chartering, Bulk carrier chartering, Freight derivatives, Case studies.

## **MARINE INSURANCE**

Assessment: This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Regulatory framework, Marine insurance and global trade, Marine insurance involving cargo types, Marine insurance contracts, Marine insurance fraud, Marine insurance market, Brokers, risk managers, lawyers, Claims, General average, Case studies

## **Research Project**

Assessment: This is a non-examination module. There will be two assessments during the semester taking the form of an oral presentation and the research report.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Qualitative research methods or quantitative research methods or mixed research methods, Setting aims and objectives, Literature review, Secondary data collection, Primary data collection, interpreting data, Selecting samples, Data presentation, Research ethics.

## **CARRIAGE OF DANGEROUS CARGOES**

Assessment: This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

Hours of tuition: Theory: 5 x periods per week

Syllabus: Regulations for the transport of dangerous goods, IMDG Code, IMSBC Code, Classification, Dangerous cargo list, Packaging, Testing of packaging, Stowage and segregation, Cargo documentation, Medical first

## **ADMIRALTY LAW AND JURISDICTION**

**Assessment:** This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour paper which will form 60% of the final mark. Pass mark is 50%.

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Ownership issues, claims management including conventional litigation and maritime arbitration, Maritime Liens, Collision, Pilotage, Limitation of shipowners, liability, Pollution, Salvage, Wreckage, General Average, Case studies

## **MARINE ACCIDENT INVESTIGATION**

**Assessment:** This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** Regulatory framework, Types of investigation, Role of the investigator, Casualty Investigation Code, Management of accident investigations, collecting evidence, Preserving evidence, Interested parties, Witness interviews, Human factors, Physical factors, SHEL Model, Investigation techniques, Investigation report, Case studies

## **MARINE ENVIRONMENTAL LAW**

**Assessment:** This is an examination module. There will be three assessments during the semester taking either the form of class tests, oral presentation, assignment, poster presentation and/ or case studies. This will form 40% of the final mark. Students will require a sub-minimum of 40% to be eligible for the examination. The examination will be a three-hour closed book paper which will form 60% of the final mark. Pass mark is 50%.

**Hours of tuition:** Theory: 5 x periods per week

**Syllabus:** National regulatory framework, International regulatory framework, MARPOL, Anti-fouling Convention, Ballast water management, Climate change, Marine biodiversity, Law of the sea, Protection of the marine

environment, Delimitation of the jurisdiction zones, Fisheries Management.