



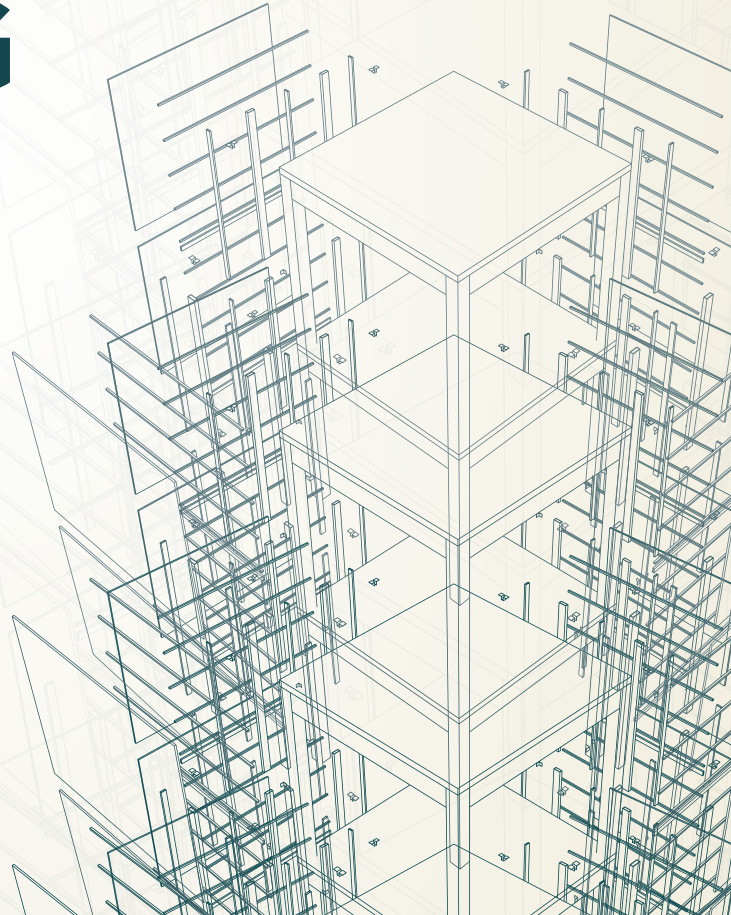
THE UNIVERSITY OF TRINIDAD AND TOBAGO

Our **NATIONAL UNIVERSITY**

*IN PURSUIT OF EXCELLENCE*

National Engineering Technician  
Diploma in

**CIVIL  
ENGINEERING**



## **ABOUT THE PROJECT MANAGEMENT AND CIVIL INFRASTRUCTURE SYSTEMS UNIT AT UTT**

The Project Management and Civil Infrastructure Systems Unit at The University of Trinidad and Tobago (UTT) delivers programmes tailored to meet the challenges of the 21st century. These programmes span the fields that provide the necessities for human life and civil societies such as energy, shelter, high quality food, water, and air, and the infrastructure for commerce.



**Dr. Amarnath Chinchamee**  
*Overall Programme Leader  
Project Management and Civil  
Infrastructure Systems Unit, UTT*

## **MESSAGE FROM THE OVERALL PROGRAMME LEADER**

As the overall Programme Leader of the Project Management and Civil Infrastructure Systems (PMCIS) Unit, I am incredibly pleased that you have considered UTT as the preferred tertiary education institution to further your educational goals. You may be about to complete your CSEC or CAPE examinations and are now looking toward your next step. You have already completed these exams and are ready to move further with your technician's diploma or your bachelor's degree. The PMCIS Unit at UTT is the place for you.

At the National University, we have tailored our curriculum to cater to all types of learners. Whether you are visual, kinesthetic, or auditory, we have developed learning exercises that suit you. In addition to lectures and tutorials, students are exposed to laboratory exercises and site visits in all the core areas of Civil Engineering. These include Construction and Project Management, Environmental Engineering, Fluid Mechanics, Geotechnical Engineering, Land Surveying, Construction Materials, and Structural Engineering.

When the effect of the COVID-19 pandemic swept through the globe, UTT was ready and prepared to deliver blended learning to our students. Long before the pandemic, the University invested heavily in providing education in a digital environment. We reached students at our Tobago, Port of Spain, and San Fernando campuses synchronously and asynchronously. We ensured that no one was left behind and their learning experience was not compromised.

I am aware that many of you intend to pursue these programmes through the part-time option. We understand how difficult it can be to manage job demands, meet family obligations, and engage in an engineering educational programme. In service to its students, UTT has been consistently helping them navigate these challenges, producing industry-ready technicians and engineers.

I look forward to welcoming you to the UTT family and wish you all the success in your future goals.

# NATIONAL ENGINEERING TECHNICIAN DIPLOMA IN CIVIL ENGINEERING

The National Engineering Technician Diploma (NETD) in Civil Engineering is an advanced diploma programme which targets those seeking a career as a Technician within the Civil Engineering industry or seeking to transition to the Bachelor of Applied Science (B.A.Sc.) degree programme.

This programme develops practical knowledge, design skills and improve students' communication and organisational abilities through team-based projects. Students are given an introduction to the world of Civil Engineering through courses such as Structural Analysis and Design, Environmental Engineering, Construction Technology, Quantity Surveying and Engineering Surveying.

Drawing skills, especially Computer-aided Design (CAD) are applied in a number of subject areas. Team-building, communication and computer applications are integral elements of both first and second-year courses.



## Programme Structure

The NETD in Civil Engineering is awarded with the successful acquisition of 84 credits. Students are continuously assessed either via 100% coursework or a mixture of in-course evaluation and final examinations. The programme is designed so that there is a balance of examinations and coursework-only courses, and is offered either full-time (2 years) or part-time (3 years).

## Programme Venues

The NETD in Civil Engineering is offered at the following locations:

- **UTT San Fernando Campus**  
V.V. Gopaul Drive, Tarouba
- **UTT John S. Donaldson Port-of-Spain Campus**  
Wrightson Road, Port-of-Spain

Both campuses are fully equipped with the latest multimedia equipment and Civil Engineering laboratories.

## UTT and Accreditation

***In December 2017, UTT received Continuing Institutional Accreditation from the Accreditation Council of Trinidad and Tobago (ACTT) for seven (7) years - the maximum period that can be awarded to tertiary institutions.***

This accreditation offers speaks to three major areas: “Competence” (assessing the skills and training given to students), “Opportunity” (preparing the students to seize opportunities in the world of work) and “Portability” (ensuring that the students’ qualifications can be recognised outside of Trinidad and Tobago).



## COURSE STRUCTURE

COURSE CODE	TITLE	CR
<b>Year 1, Semester 1</b>		
COMM1023	Communications for Technicians (B)	2
LFSK1004	Life Skills for Technicians B	1
CONS1018	Construction Technology I	4
CHEM1005	Chemistry for Technicians	3
SVYG1003	Engineering Surveying and Modelling I	4
MATH1006	Mathematics for Technicians I	3
GEOT1003	Geotechnical Engineering for Technicians I	1
<b>Semester Credits</b>		<b>21</b>
<b>Year 1, Semester 2</b>		
CONS1012	Physics for Technicians	4
WRSE2001	Hydrostatics	3
CONS1014	Construction Materials and Sustainability	4
STRU1015	Structural Analysis I	3
CONS2018	Construction Technology II	4
ENVR1001	Environmental Engineering I	3
<b>Semester Credits</b>		<b>21</b>

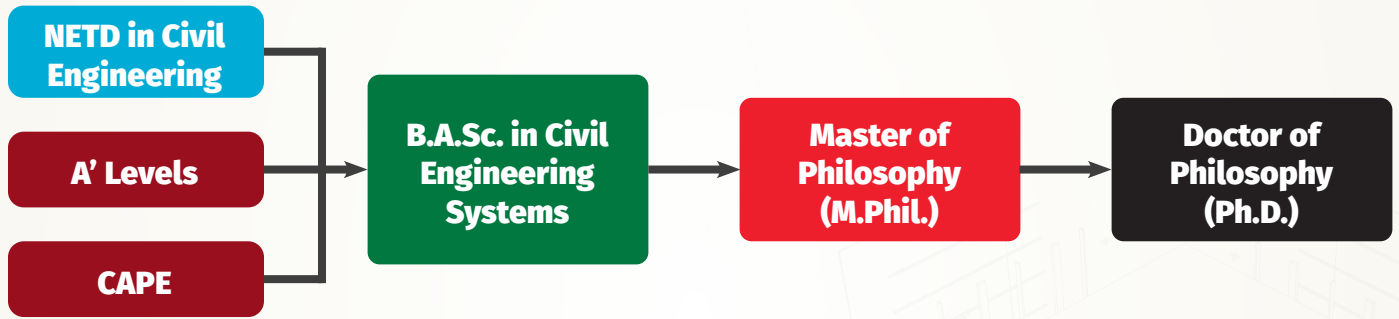
COURSE CODE	TITLE	CR
<b>Year 2, Semester 1</b>		
MATH1007	Mathematics for Technicians II	4
STRU2015	Structural Analysis II and Basic Design	3
CONS2020	Construction Technology II	4
CONS2019	Contract Tendering and Administration	3
ESCO1003	Estimating, Measurement and Modelling	4
PRAC2016	Civil Engineering Project I	3
<b>Semester Credits</b>		<b>21</b>
<b>Year 2, Semester 2</b>		
WRSE2003	Fluid Dynamics in Civil Engineering	4
ENVR2003	Environmental Engineering II	3
SVYG2003	Engineering Surveying and Modeling II	4
MATH2013	Mathematics for Technicians III	4
GEOT2011	Geotechnical Engineering for Technicians III	4
PRAC2017	Civil Engineering Project II	3
<b>Semester Credits</b>		<b>21</b>

**TOTAL PROGRAMME CREDITS: 84**

## Further Study

Career prospects for our graduates are excellent as technician graduates may choose to advance to any engineering degree programmes or any other national or international university.

B.A.Sc. graduates may choose to advance to Master of Science or Master of Philosophy degree programmes at The University of Trinidad and Tobago or any other national or international university.



## Potential Careers

Our programmes in Project Management and Civil Infrastructure Systems are tailored to overcome the challenges of modern engineering in the 21st century. The development of multi-disciplinary firms, changes in the funding of projects and the adaptation of modern contractual arrangements in Trinidad and Tobago, has reinforced the need for civil engineering graduates. Among the engineering disciplines, civil engineers hold the highest number of jobs globally.

Successful graduates can be employed in the areas of contracting or consultancy, including but not limited to:

- Construction Engineering
- Civil, Environmental, Structural, Geotechnical and Water Resource Management
- Transportation
- Project and Construction Management
- Project Execution Units
- Water and Wastewater Treatment Facilities
- Teaching

## Standard Entry Requirements

The admission requirements are in accordance with the University's regulations for admission to undergraduate B.A.Sc. Programme:

- **Passes in a minimum of five (5) subjects at CSEC (CXC O'Level) General Proficiency level in Grades I or II and from 1998 Grade III including Mathematics, English Language and any two (2) from the following group: Physics; Chemistry; Integrated Science; Technical Drawing; Information Technology, OR**
- **GCE Ordinary Levels with Grades A, B or C, including Mathematics, English Language and any two (2) from the following group: Physics; Chemistry; Integrated Science; Technical Drawing; Information Technology**

## Non-standard Entry Requirements

An applicant who does not satisfy all the stipulated minimum academic or technical qualifications for admission to a programme, based on years of experience and the ability to handle the level of programme learning, may be accepted as a mature student. The applicant would need to possess the critical elements of the stipulated qualification and would be assessed by a team appointed by the Programme Professor/Leader as possessing a combination of qualifications and educational or experiential maturity to enable him/her to successfully participate in the programme.

## Tuition

UTT's Civil Engineering programmes are approved for funding under the Government Assistance for Tuition Expenses (GATE). Tuition for the B.A.Sc. in Civil Engineering is as follows:

	COST PER CREDIT	TOTAL TUITION	ANNUAL TUITION		SELF-FUNDED TUITION	SELF-FUNDED ANNUAL TUITION	
			Full-time	Part-time		Full-time	Part-time
<b>Trinidad and Tobago Nationals</b>	TT \$428.57	TT \$36,000	TT \$18,000	TT \$12,000	TT \$30,600	TT \$15,300	TT \$10,200
<b>CARICOM/OECS Nationals</b>	TT \$535.71	US \$6,820	US \$3,410				
<b>International Students</b>	TT \$642.86	US \$8,180	US \$4,090				

# STAFF LISTING

## **Professor WINSTON H.E. SUITE**

Senior Academic Fellow

*B.Sc. (Special) Physics, B.Sc. (Hons) Civil Engineering (UWI), M.Sc. Construction Engineering and Management, Ph.D. Concrete Technology (UWI) FAPETT, FASCE, FCAS, MACI, R.Eng.*

*Construction Engineering and Management, Project Management, Concrete Technology, and Disaster Management*

## **Dr. AMARNATH CHINCHAMEE**

Assistant Professor and Overall Programme Leader

*B.Sc. (Hons) Surveying and Land Information (UWI), Ph.D. Surveying and Land Information (UWI) MISTT, MASCE*

*Engineering Surveying, Engineering Graphics, GIS in Natural Resource Management, GIS, and CAD*

## **Dr. CLINT SUTHERLAND**

Assistant Professor

*B.Sc. (Hons) Civil Engineering (UWI), Ph.D. Civil Engineering (UWI) MAPETT, AMASCE, GMICE*

*Water and Wastewater Engineering, Advanced Environmental Engineering Systems and Design, Physicochemical Processes and Water Reuse, Foundation Engineering, and Sustainable Design*

## **Dr. BEVERLY CHITTOO**

Assistant Professor

*B.A.Sc. Civil Engineering Systems with Construction Engineering and Management (UTT), Ph.D. Environmental Engineering (UTT)*

*A.M.APPET, Aff.ASCE, G.M.ICE*

*Environmental Engineering, Geotechnical Design, Soil Mechanics and Structural Analysis*

## **Dr. DANIEL. L. WHITE**

Assistant Professor

*B.Sc. (First Class Honours) Physics (UWI)*

*Ph.D. Physics: Materials Science (UWI)*

*Alkali-activated Binders, Geopolymer Concrete, Concrete Technology, Recycling of Industrial Waste, Dental Materials, Clay-based ceramics, and Asphaltic Materials*

## **Dr. FAEIS JAFAR**

Assistant Professor

*B.Sc. Civil Engineering, M.Sc. Civil Engineering,*

*Ph.D. International Relations*

*MAPETT, R. Eng.*

*Structural Design and Analysis, Dynamics of Structures, and Social Research Methodologies*

## **Dr. NAVIN RAMROOP**

Assistant Professor

*B.Sc. Civil Engineering (UWI), M.Sc. Structural Engineering (Surrey), Ph.D. Structural Engineering (Bristol), MAPETT, MASCE, MSEI, R. Eng.*

*Structural Engineering, Forensic Structural Engineering, Building Pathology, Shell and Spatial Structures, Structural and Finite Element Analysis, and Earthquake Engineering*

## **Mr. SAEED MOHAMED**

Research Associate

*B.Sc. (Hons) Civil Engineering (UWI), M.Sc. Construction Engineering and Management MAPETT, R. Eng.*

*Construction Management, Quality Assurance, Geotechnical Engineering, and Soil Mechanics*

### **Mrs. ARUNA RAJBALLIE**

Senior Instructor

*B.Sc. (Hons) Mathematics and Physics (UWI), M.Sc. (Distinction) Statistics Pursuing Ph.D. in Statistics (UWI)  
FRSS, A.M.ASCE*

*Statistical Modeling, Spatial Statistics, Water Demand Management, Neural Networks*

### **Mrs. KAVITA RAMNARINE-RAMSAWAK**

Senior Instructor

*B.Sc. (Hons) Civil Engineering (UWI), M.Sc. Coastal Engineering and Management (UWI), MAPETT, MASCE, R. Eng, Pursuing Ph.D. Civil Engineering*

*Coastal Engineering, Construction Engineering and Management, Climate Change*

### **Mrs. SHALINI RAMSARAN-BAKSH**

Senior Instructor

*B.Sc. Environmental and Natural Resource Management with Geography (UWI), M.Sc. Environmental Engineering (UWI), Pursuing M.Phil. in Environmental Engineering and Chemistry*

### **Mr. RAVI BABOOLAL**

Instructor II

*B.Sc. (Hons) Civil Engineering (UWI), M.Sc. Water and Wastewater Services Management (UWI)*

*Hydrology and Water Resources, Open Channel Hydraulics, Fluid Mechanics, Soil Mechanics, Geotechnical Design, Climate Change and Construction Technology and Materials*

### **Mr. IQBAL MOHAMMED**

Instructor II

*B.Sc. Land Surveying (UWI)  
MISTT, Member of the Disciplinary Board of Land Surveyors  
Surveying*

### **Mr. DAMIAN VINCENT AMIR AEXANDER**

Instructor II

*M.Sc. Geotechnical Engineering with Merit (Dundee), B.Sc. (Hons) Civil with Environmental Engineering (UWI), B.Sc. (Hons) Physics with Materials Science (UWI)*

*A.M.ASCE, Member of Geo-Institute.*

*Unsaturated Soils Mechanics and Slope Stability, Soil Dynamics, Earthquake Engineering, Expansive Soils, Forensic Geotechnical Engineering*

### **Mr. TYRONE DASS**

Senior Instructor

*B.Sc. (Honours) Mathematics (University of London), M.Sc. Mathematics (UWI), Pursuing Ph.D. in Mathematics (UWI)*

### **Mrs. YANITZA WILSON-OLLIVIERRE**

Senior Instructor

*B.Sc. Physics and Environmental Physics (UWI), M.Sc. Petroleum Engineering (UTT), M.Sc. Nanophysics and Advanced Materials (Complutense University of Madrid), SPE, Physics and Materials*

### **Mr. TARUN DOERGA**

Senior Instructor

*B.Eng. (Hons) Civil Engineering (University of Guyana), M.Sc. Construction Engineering and Management (UWI), Pursuing Ph.D. in Construction Engineering and Management*

*MAPETT*

*Construction Planning Scheduling and Control, Construction Methods and Equipment Economics, Project Management, Sustainable Design, Construction Safety & Risk Management, Geotechnical and Structural Engineering*

### **Mr. MARK BALKARAN**

Instructor II

*B.Sc. (Hons.) Geomatics (UWI); M.Sc. Commercial Management and Quantity Surveying (Heriot-Watt University)*

*Quantity Surveying, Engineering Surveying*

### **Ms. TREVENE JOHN**

Instructor II

*B.Sc. Civil Engineering (UWI), M.Sc. Civil Engineering (UWI)*

*MAPETT, R.Eng*

*Structural Analysis and Design, Earthquake Engineering, Dynamics of Structures*

### **Mrs. TAYEDA ALI**

Instructor II

*Dip. Project Management (UWI), B.A.Sc (Hons) Civil Engineering Systems (UTT), B.Sc. Physics (Environmental Physics / Medical Physics and Bioengineering) (UWI), M.Sc. Construction Project Management (Heriot-Watt), SFC, PMP*

*PMI, PMISCC*

*Construction Engineering and Management, Project Planning and Scheduling, Project Scheduling Software (Microsoft Project and Primavera P6), Construction Cost Estimating and Cost Control, Project Management, SCRUM, KANBAN, Six Sigma, Occupational Health and Safety, Lean Construction, LEED, Green and Sustainable Engineering*

# TECHNICAL STAFF

## **Mr. QUINTIN JOSEPH**

Technical Assistant

*B.Sc. Biology (Howard University), M.Sc. Environmental Science and Management (UTT), Pursuing B.A.Sc. Civil Engineering (UTT)*

## **Ms. AMANDA MOHAMMED**

Laboratory Technician I

*NETD Civil Engineering (UTT), Pursuing B.A.Sc. Civil Engineering (UTT)*

## **Mr. SAGE DANIEL**

Laboratory Technician I

*B.A.Sc. (Hons) Civil Engineering with a specialisation in Structural Engineering (UTT), Pursuing M.Sc. Civil Engineering (UWI)*

## **Mr. GARVIN MANGAL**

Laboratory Technician II

*B.Sc. Environmental and Natural Resources Management (UWI)  
M.Sc. Environmental Science and Management (UTT)*

## **Mr. SHIVADESH RAJAHRAM**

Lab Technician I, Engineering Surveying

*B.Sc. Geomatics (UWI), MSc. Geoinformatics (UWI)*





## THE UNIVERSITY OF TRINIDAD AND TOBAGO (UTT)

UTT John S. Donaldson Port-of-Spain Campus  
15-21 Wrightson Road, WOODBROOK 170605  
Tel: (868) 642-8888/223-4888

UTT San Fernando Campus  
1-25 V.V. Gopaul Drive, Tarouba, SAN FERNANDO 602905  
Tel: (868) 642-8888/223-4888

[www.utt.edu.tt](http://www.utt.edu.tt)

*For more information, please contact:*

Mrs. NADINE RAMPERSAD-ARCHIE  
*Programme Officer*

(868) 642-8888 ext. 25005  
nadine.rampersad@utt.edu.tt

MS. MARISA CHARLES  
*Administrative Assistant II*  
(868) 642-8888 ext. 21846  
marisa.charles@utt.edu.tt



The Institution of  
**StructuralEngineers**



INSTITUTE OF  
HIGHWAY  
ENGINEERS



Chartered Institution of Highways & Transportation



**The NETD in Civil Engineering is accredited by the Joint Board of Moderators (JBM) comprising the Institution of Civil Engineers, the Institution of Structural Engineers, the Institute of Highway Engineers, the Chartered Institution of Highways and Transportation and the Permanent Way Institution on behalf of the Engineering Council for the purposes of fully meeting the academic requirements for registration as an Engineering Technician (EngTech) and partially meeting the academic requirement for registration as an Incorporated Engineer (IEng).**

*Candidates must hold a Bachelor's (with or without honours) accredited as Further Learning for IEng to hold accredited qualifications for IEng registration.*

