

## REVISED PROGRAMME STRUCTURE FOR COMPUTING DEGREES

1. Bachelor of Technology (Hons) in Computer Systems and Network (BTSN)
2. Bachelor of Technology (Hons) in Multimedia Design (BTMD)
3. Bachelor of Technology (Hons) in Networks and Data Communication (BTNC)
4. Bachelor of Technology (Hons) in Software Engineering (BTSE)
5. Bachelor of Technology (Hons) in Database Management (BTDM)
6. Graduate Diploma in Database Management (GDDM)

Careers in computing continue to grow as a result of new and advanced technology. Therefore, there is a need to ensure WOU students are equipped with knowledge that reflects the current trends in technology. In line with this, the School of Science and Technology has restructured the Computing programmes and **all students pursuing studies in the above mentioned programmes are required to follow the revised programme structure beginning July 2015 semester.** Please note that most of the courses that have been removed from the old structure will not be offered in future semesters.

The School will give special exemption to students who **have passed** the courses in the old programme structure that are deemed equivalent to courses in the new programme structure. **All students who have passed the course(s) in the old structure will be automatically exempted from the equivalent course(s) in the new structure as explained in the following pages.**

## Bachelor of Technology (Honours) in Computer Systems and Networks (BTSN)

The details of the revised BTSN programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>CORE MAJOR COURSES</b>			
TSN303/05	Distributed Systems	TSN304/05	Network Applications
<b>ELECTIVE COURSES (Choose Any Two)</b>			
TCC239/05	Problem Solving with Object in Java	<b><i>Removed from the new structure</i></b>	
TCC240/05	Object-Oriented Analysis and Design		
		BBM103/05	Principles and Practice of Management
		BBM210/05	Entrepreneurship Development
		TAI303/05	Intelligent Systems for Decision Support
		TEC315/05	Web Design Fundamentals
		TMT305/05	Fundamentals of Multimedia Technology

### Special exemption due to BTSN programme revision:

1. Students who have been exempted from or passed TSN303/05 Distributed Systems in the old structure will be exempted from TSN304/05 Network Applications in the new structure.
2. Students who have been exempted from or passed TCC239/05 Problem Solving with Object in Java or TCC240/05 Object-Oriented Analysis and Design in the old structure are considered to have fulfilled one Elective course. Students who have been exempted from and/or passed both courses in the old structure are considered to have fulfilled two Elective courses in the new structure.

### NOTE:

TSN303/05, TCC239/05 and TCC240/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examinations, the University may consider offering these courses in the future semesters.

## Bachelor of Technology (Honours) in Multimedia Design (BTMD)

The details of the revised BTMD programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>CORE MAJOR COURSES</b>			
TEC314/05	Introduction to Electronic Commerce	TCC242/05	Web Database Application
TEC316/05	Advanced Electronic Commerce	TSE305/05	Software Project Management
<b>ELECTIVE COURSES *</b>			
TCC242/05	Web Database Application	<i>Offered as Core Major in the new structure</i>	
TSE305/05	Software Project Management	<i>Offered as Core Major in the new structure</i>	
TCC240/05	Object-Oriented Analysis and Design	<i>Removed from the new structure</i>	
BBM104/05	Principles of Marketing		
		TCC301/05	Systems Security
		TSE302/05	Software Requirement and Specification
		TSE307/05	Computational Logic
		TSE310/05	Software Reliability & Quality Assurance

### Special exemption due to BTMD programme revision:

1. Students who have been exempted from or passed TEC314/05 Introduction to Electronic Commerce in the old structure will be exempted from TCC242/05 Web Database Application in the new structure.
2. Students who have been exempted from or passed TEC316/05 Advanced Electronic Commerce in the old structure will be exempted from TSE305/05 Software Project Management in the new structure.
3. Students who have been exempted from or passed TCC242/05 Web Database Application in the old structure are considered to have fulfilled one Core Major course in the new structure.
4. Students who have been exempted from or passed TSE305/05 Software Project Management in the old structure are considered to have fulfilled one Core Major course in the new structure.
5. Students who have been exempted from or passed TCC240/05 Object-Oriented Analysis and Design in the old structure are considered to have fulfilled one Elective course in the new structure.
6. Students who have been exempted from or passed BBM104/05 Principles in Marketing in the old structure are considered to have fulfilled one Elective course in the new structure.

(continued...)

7. Students who have been exempted from and/or passed all of the following FOUR courses in the old structure are considered to have fulfilled two Core Major courses in the new structure AND will be exempted from TWO Elective courses in the new structure:-
  - i. TEC314/05 Introduction to Electronic Commerce
  - ii. TEC316/05 Advanced Electronic Commerce
  - iii. TCC242/05 Web Database Application
  - iv. TSE305/05 Software Project Management
  
8. Students who have been exempted from and/or passed any THREE of the following four courses in the old structure are considered to have fulfilled two Core Major courses in the new structure AND will be exempted from ONE Elective course in the new structure:-
  - i. TEC314/05 Introduction to Electronic Commerce
  - ii. TEC316/05 Advanced Electronic Commerce
  - iii. TCC242/05 Web Database Application
  - iv. TSE305/05 Software Project Management

Students under this category are required to take ONE more Elective course in the new structure.

**\* Important reminder**

- (a) Students are required to take ONE Elective course only if they are taking the compulsory course – TUC209/06 Industrial Training.
- (b) Students are required to take TWO Elective courses if they have been granted exemption for TUC209/06 Industrial Training. Students who are working in the relevant industry can apply for exemption for TUC209/06. Exemption for this course is not given automatically. As such, students must apply at the Regional Centre.

**Note:**

- 1) As TEC314/05 and TEC316/05 are also core courses for another programme, i.e. BTEC, these courses will be offered for another one to two presentations until the BTEC programme is completely phased out.
- 2) TCC240/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examination, the University may consider offering this course in the future semesters.

## Bachelor of Technology (Honours) in Networks and Data Communication (BTNC)

The details of the revised BTNC programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>CORE MAJOR COURSES</b>			
TIC302/05	Network Design	TIC301/05	Digital Communications
TSN303/05	Distributed Systems	TSE307/05	Computational Logic
<b>ELECTIVE COURSES *</b>			
TCC240/05	Object-Oriented Analysis and Design	<i>Removed from the new structure</i>	
TCC242/05	Web Database Application		
		BBM210/05	Entrepreneurship Development

### Special exemption due to BTNC programme revision:

1. Students who have been exempted from or passed TIC302/05 Network Design in the old structure will be exempted from TIC301/05 Digital Communications in the new structure.
2. Students who have been exempted from or passed TSN303/05 Distributed Systems in the old structure will be exempted from TSE307/05 Computational Logic in the new structure.
3. Students who have been exempted from or passed TCC240/05 Object-Oriented Analysis and Design or TCC242/05 Web Database Application in the old structure are considered to have fulfilled one Elective course in the new structure. Students who have been exempted from both TCC240/05 and TCC242/05 in the old structure are considered to have fulfilled two Elective courses in the new structure.

### \* Important reminder

- (a) Students are required to take ONE Elective course only if they are taking the compulsory course – TUC209/06 Industrial Training.
- (b) Students are required to take TWO Elective courses if they have been granted exemption for TUC209/06 Industrial Training. Students who are working in the relevant industry can apply for exemption for TUC209/06. Exemption for this course is not given automatically. As such, students must apply at the Regional Centre.

### NOTE:

TIC302/05, TSN303/05 and TCC240/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examinations, the University may consider offering these courses in the future semesters.

## Bachelor of Technology (Honours) in Software Engineering (BTSE)

The details of the revised BTSE programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>BASIC MAJOR COURSES</b>			
TCC240/05	Object-Oriented Analysis and Design	TCC122/05	Discrete Structures
TCC238/05	Structured Programming	<i>Offered as Elective course in the new structure</i>	
		TCC236/05	Data Structures and Algorithms
<b>ELECTIVE COURSES *</b>			
TCC241/05	Database Programming	<i>Removed from the new structure</i>	
TEC205/05	Information Systems Management		
		TAI303/05	Intelligent Systems for Decision Support
		TCC238/05	Structured Programming
		TCC242/05	Web Database Applications
		TMT305/05	Fundamentals of Multimedia Technology

### Special exemption due to BTSE programme revision:

1. Students who have been exempted from or passed TCC240/05 Object-Oriented Analysis and Design in the old structure will be exempted from TCC122/05 Discrete Structures in the new structure.
2. TCC236/05 Data Structures and Algorithms is a new course added to the BTSE programme. All students are required to take this course in the new structure.
3. TCC238/05 Structured Programming is previously offered as a Basic Major course in the old structure but is now offered as an Elective course in the new structure. Students who have been exempted from or passed TCC238/05 in the old structure are considered to have fulfilled one Elective course in the new structure.
4. Students who have been exempted or passed TCC238/05 Structured Programming AND have been exempted or passed another ONE Elective course in the old structure will be considered to have fulfilled two Electives courses in the new structure.
5. Students who have been exempted or passed TCC238/05 Structured Programming AND already fulfilled TWO Elective courses in the old structure will be exempted from TCC236/05 Data Structures and Algorithms (Basic Major) in the new structure.
6. Students who have been exempted from or passed TCC241/05 Database Programming or TEC205/05 Information Systems Management in the old structure are considered to have fulfilled one Elective course in the new structure. Students who have been exempted from and/or passed both courses are considered to have fulfilled two Elective courses in the new structure.

**\* Important reminder**

- (a) Students are required to take ONE Elective course only if they are taking the compulsory course – TUC209/06 Industrial Training.
- (b) Students are required to take TWO Elective courses if they have been granted exemption for TUC209/06 Industrial Training. Students who are working in the relevant industry can apply for exemption for TUC209/06. Exemption for this course is not given automatically. As such, students must apply at the Regional Centre.

**NOTE:**

TCC241/05 and TCC240/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examinations, the University may consider offering these courses in the future semesters.

## Bachelor of Technology (Honours) in Database Management (BTDM)

The details of the revised BTDM programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>CORE MAJOR COURSES</b>			
TCC241/05	Database Programming	TCC236/05	Data Structures and Algorithms
TDM302/05	Advanced Database Administration	TAI303/05	Intelligent Systems for Decision Support
<b>ELECTIVE COURSES *</b>			
TCC239/05	Problem Solving with Object in Java	<i>Removed from the new structure</i>	
BIS307/05	Strategic Information Systems		
		TCC301/05	Systems Security
		TEC205/05	Information Systems Management
		TEC315/05	Web Design Fundamentals
		TMT305/05	Fundamentals of Multimedia Technology

### Special exemption due to BTDM programme revision:

1. Students who have been exempted from or passed TCC241/05 Database Programming in the old structure will be exempted from TCC236/05 Data Structures and Algorithms in the new structure.
2. Students who have been exempted from or passed TDM302/05 Advanced Database Administration in the old structure will be exempted from TAI303/05 Intelligent Systems for Decision Support in the new structure.
3. Students who have passed TCC239/05 Problem Solving with Object in Java or BIS307/05 Strategic Information Systems in the old structure are considered to have fulfilled one Elective course in the new structure. Students who have been exempted from and/or passed both courses are considered to have fulfilled two Elective courses in the new structure.

### \* Important reminder

- (a) Students are required to take ONE Elective course only if they are taking the compulsory course – TUC209/06 Industrial Training.
- (b) Students are required to take TWO Elective courses if they have been granted exemption for TUC209/06 Industrial Training. Students who are working in the relevant industry can apply for exemption for TUC209/06. Exemption for this course is not given automatically. As such, students must apply at the Regional Centre.

### NOTE:

TCC241/05, TDM302/05 and TCC239/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examinations, the University may consider offering these courses in the future semesters.

## Graduate Diploma in Database Management (GDDM)

The details of the revised GDDM programme structure are shown in the following table. Please note that ALL other courses not mentioned in the list remain the same.

OLD PROGRAMME STRUCTURE		NEW PROGRAMME STRUCTURE	
Course Code and Course Title		Course Code and Course Title	
<b>BASIC MAJOR COURSES</b>			
TCC241/05	Database Programming	TCC236/05	Data Structures and Algorithms
TCC242/05	Web Database Application	<i>Offered as Core Major course in the new structure</i>	
		TCC122/05	Discrete Structures
<b>CORE MAJOR COURSES</b>			
		TCC242/05	Web Database Application
TDM302/05	Advanced Database Administration	<i>Removed from the new structure</i>	
<b>ELECTIVE COURSES</b>			
TCC239/05	Problem Solving with Object in Java	<i>Removed from the new structure</i>	
		TAI201/05	Human Computer Interaction
		TCC235/05	Software Engineering
		TCC301/05	Systems Security

### **Special exemption due to GDDM programme revision:**

1. Students who have been exempted from or passed TCC241/05 Database Programming in the old structure will be exempted from TCC236/05 Data Structures and Algorithms in the new structure.
2. TCC242/05 Web Database Application is previously offered as Basic Major course in the old structure but is now offered as Core Major course in the new structure. Students who have been exempted from or passed TCC242/05 Web Database Application in the old structure are not required to take this course in the new structure.
3. TCC122/05 Discrete Structures is a new Basic Major course added to GDDM programme. Students are required to take this course in the new structure.
4. Students who have been exempted from and passed TDM302/05 Advanced Database Administration in the old structure will be exempted from TCC122/05 Discrete Structures (Core Major) in the new structure.
5. Students who have been exempted from or passed TCC239/05 Problem Solving with Object in Java in the old structure are considered to have fulfilled one Elective course in the new structure.

### **NOTE:**

TCC241/05, TDM302/05, and TCC239/05 will not be offered in the future semesters. However, if there are students who are eligible for supplementary examinations, the University may consider offering these courses in the future semesters.