

## University of Pretoria Yearbook 2016

## Mathematical statistics 121 (WST 121)

QualificationUndergraduateFacultyFaculty of Economic and Management SciencesModule credits16.00ProgrammesBCom EconometricsBCOM StatisticsBCOM StatisticsBSC Information Technology Information and Knowledge SystemsBSC (Computer Science) Computer ScienceBSC Actuarial and Financial MathematicsBSC Applied MathematicsBSC Extended programme - Mathematical SciencesBSC Mathematical StatisticsBSC MathematicsBSC PhysicsService modulesFaculty of Engineering, Built Environment and Information TechnologyFaculty of Economic and Management SciencesPrerequisitesWST 111 GS or WST 133, 143 and 153Contact time1 practical per week, 4 lectures per weekLanguage of tuitionBoth Afr and EngAcademic organisationSemester 2		,
Module credits16.00ProgrammesBCom EconometricsBCom StatisticsBSc Information Technology Information and Knowledge SystemsBSc (Computer Science) Computer ScienceBSc (Computer Science)BSC Actuarial and Financial MathematicsBSC Applied MathematicsBSC Applied MathematicsBSC Extended programme - Mathematical SciencesBSC Mathematical StatisticsBSC MathematicsBSC PhysicsService modulesFaculty of Engineering, Built Environment and Information TechnologyFaculty of Economic and Management SciencesPrerequisitesWST 111 GS or WST 133, 143 and 153Contact time1 practical per week, 4 lectures per weekLanguage of tuitionBoth Afr and EngAcademic organisationStatistics	Qualification	Undergraduate
Programmes  BCom Econometrics  BCom Statistics  BSc Information Technology Information and Knowledge Systems  BSc(Computer Science) Computer Science  BSc Actuarial and Financial Mathematics  BSc Applied Mathematics  BSc Extended programme - Mathematical Sciences  BSc Mathematical Statistics  BSc Mathematics  BSc Physics  Service modules  Faculty of Engineering, Built Environment and Information Technology  Faculty of Economic and Management Sciences  Faculty of Natural and Agricultural Sciences  Prerequisites  WST 111 GS or WST 133, 143 and 153  Contact time  1 practical per week, 4 lectures per week  Language of tuition  Both Afr and Eng  Academic organisation  Statistics	Faculty	Faculty of Economic and Management Sciences
BCom Statistics BSc Information Technology Information and Knowledge Systems BSc(Computer Science) Computer Science BSc Actuarial and Financial Mathematics BSc Applied Mathematics BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Mathematics BSc Physics  Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng  Academic organisation Statistics	Module credits	16.00
BSc Information Technology Information and Knowledge Systems BSc(Computer Science) Computer Science BSc Actuarial and Financial Mathematics BSc Applied Mathematics BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Mathematics BSc Physics Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153 Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng Academic organisation	Programmes	BCom Econometrics
BSc (Computer Science) Computer Science  BSc Actuarial and Financial Mathematics  BSc Applied Mathematics  BSc Extended programme - Mathematical Sciences  BSc Mathematical Statistics  BSc Mathematics  BSc Physics  Service modules  Faculty of Engineering, Built Environment and Information Technology  Faculty of Economic and Management Sciences  Faculty of Natural and Agricultural Sciences  Prerequisites  WST 111 GS or WST 133, 143 and 153  Contact time  1 practical per week, 4 lectures per week  Language of tuition  Both Afr and Eng  Academic organisation  Statistics		BCom Statistics
BSc Actuarial and Financial Mathematics BSc Applied Mathematics BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Mathematics BSc Physics BSc Physics  Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153 Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng Academic organisation Statistics		BSc Information Technology Information and Knowledge Systems
BSc Applied Mathematics BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Mathematics BSc Physics BSc Physics Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153 Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng Academic organisation Statistics		BSc(Computer Science) Computer Science
BSc Extended programme - Mathematical Sciences BSc Mathematical Statistics BSc Mathematics BSc Physics  Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		BSc Actuarial and Financial Mathematics
BSc Mathematics BSc Mathematics BSc Physics  Service modules Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng  Academic organisation Statistics		BSc Applied Mathematics
BSc Mathematics BSc Physics  Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences  Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		BSc Extended programme - Mathematical Sciences
BSc Physics Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153 Contact time 1 practical per week, 4 lectures per week Language of tuition Both Afr and Eng Academic organisation Statistics		BSc Mathematical Statistics
Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		BSc Mathematics
Faculty of Economic and Management Sciences Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		BSc Physics
Faculty of Natural and Agricultural Sciences  Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics	Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites WST 111 GS or WST 133, 143 and 153  Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		Faculty of Economic and Management Sciences
Contact time 1 practical per week, 4 lectures per week  Language of tuition Both Afr and Eng  Academic organisation Statistics		Faculty of Natural and Agricultural Sciences
Language of tuition Both Afr and Eng  Academic organisation Statistics	Prerequisites	WST 111 GS or WST 133, 143 and 153
Academic organisation Statistics	Contact time	1 practical per week, 4 lectures per week
-	Language of tuition	Both Afr and Eng
Period of presentation Semester 2	Academic organisation	Statistics
	Period of presentation	Semester 2

## **Module content**

Sampling distributions and the central limit theorem. Statistical inference: Point and interval estimation. Hypothesis testing with applications in one and two-sample cases. Introductory methods for: Linear regression and correlation, analysis of variance, categorical data analysis and non-parametric statistics. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to



