

# CS-1A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Introduction to Information and Communication Technology - Lab Muiz Qadir		L U N C H	English Composition and Comprehension - Lab Muhammad Iqbal	English Composition and Comprehension - Lab Muhammad Iqbal English Composition and Comprehension Junaid Shahid
Tuesday	Digital Logic Design Mirza Waqar Baig	Islamic Studies/Ethics Rizwanullah	English Composition and Comprehension - Lab Sadia Ashfaq English Composition and Comprehension Muhammad Ammar		English Composition and Comprehension - Lab Sadia Ashfaq	Programming Fundamentals Rizwan ul Haq
Wednesday	Digital Logic Design - Lab Muhammad Arslan				Linear Algebra Amjad Hussain	
Thursday	Programming Fundamentals - Lab Mughees Ismail		English Composition and Comprehension Junaid Shahid		Programming Fundamentals Rizwan ul Haq	Digital Logic Design Mirza Waqar Baig
Friday	Islamic Studies/Ethics Rizwanullah	Linear Algebra Amjad Hussain	English Composition and Comprehension Muhammad Ammar			

# CS-1B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Islamic Studies/Ethics Rizwanullah 1	English Composition and Comprehension - Lab Farah Iqbal 1		L U N C H	Digital Logic Design - Lab Mujahid Hussain 1	
Tuesday	Linear Algebra Amjad Hussain 1	English Composition and Comprehension Muhammad Ammar 1	Introduction to Information and Communication Technology - Lab Umar Naseer 1		Introduction to Information and Communication Technology - Lab Umar Naseer 1	Digital Logic Design Muhammad Sajid Iqbal 1
Wednesday	English Composition and Comprehension Muhammad Ammar 1	Programming Fundamentals - Lab Pariwish Touseef 1				
Thursday	English Composition and Comprehension - Lab Muhammad Iqbal 1	English Composition and Comprehension Junaid Shahid 1	Linear Algebra Amjad Hussain 1		Digital Logic Design Muhammad Sajid Iqbal 1	
Friday		Programming Fundamentals Rizwan ul Haq 1			Islamic Studies/Ethics Rizwanullah 1	Programming Fundamentals Rizwan ul Haq 1

# CS-1C

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	English Composition and Comprehension - Lab Rida Akram		English Composition and Comprehension - Lab Junaid Shahid	L U N C H	English Composition and Comprehension - Lab Junaid Shahid	Linear Algebra Amjad Hussain
Tuesday	Digital Logic Design - Lab Mujahid Hussain		English Composition and Comprehension Junaid Shahid		Linear Algebra Amjad Hussain	English Composition and Comprehension Muhammad Ammar
Wednesday	Introduction to Information and Communication Technology - Lab Aqsa Younas		Programming Fundamentals Dr. Rabia Maqsood		English Composition and Comprehension Junaid Shahid	
Thursday			Islamic Studies/Ethics Zia Ahmad		Programming Fundamentals - Lab Ayesha Liaqat	
Friday	Programming Fundamentals Dr. Rabia Maqsood	Islamic Studies/Ethics Zia Ahmad	Digital Logic Design Dr. Adil Zulfiqar		English Composition and Comprehension Muhammad Ammar	Digital Logic Design Dr. Adil Zulfiqar

# CS-1D

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Islamic Studies/Ethics Zia Ahmad	English Composition and Comprehension Farah Iqbal English Composition and Comprehension Sadia Ashfaq	English Composition and Comprehension - Lab Rida Akram	L U N C H	English Composition and Comprehension - Lab Rida Akram	
Tuesday	Introduction to Information and Communication Technology - Lab Aqsa Younas		English Composition and Comprehension Farah Iqbal		Applied Physics Waheed Ahmad	Calculus and Analytical Geometry Dr.Mushtaq Ahmad
Wednesday	English Composition and Comprehension - Lab Amna Farooq		Programming Fundamentals Dr. Rabia Maqsood		Programming Fundamentals Dr. Rabia Maqsood	Calculus and Analytical Geometry Dr.Mushtaq Ahmad
Thursday	Islamic Studies/Ethics Zia Ahmad	Applied Physics Waheed Ahmad			Programming Fundamentals - Lab Muhammad Azeem Iftikhar	
Friday		English Composition and Comprehension Sadia Ashfaq				

# CS-1E

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Calculus and Analytical Geometry Dr. Mushtaq Ahmad	Introduction to Information and Communication Technology - Lab Muiz Qadir		L U N C H	English Composition and Comprehension - Lab Amna Farooq English Composition and Comprehension Muhammad Iqbal	English Composition and Comprehension - Lab Amna Farooq
Tuesday		Pakistan Studies Asif Naveed	English Composition and Comprehension Muhammad Iqbal		Programming Fundamentals - Lab Mughees Ismail	
Wednesday			Applied Physics Waheed Ahmad		Applied Physics Waheed Ahmad	Pakistan Studies Asif Naveed
Thursday	English Composition and Comprehension Farah Iqbal	English Composition and Comprehension - Lab Mah Rukh			Programming Fundamentals Dr. Danish Shehzad	
Friday			English Composition and Comprehension Farah Iqbal		Calculus and Analytical Geometry Dr. Mushtaq Ahmad	

# CS-1F

Day/Period	I	II	III	1:15-1:45	IV	V
Monday			Programming Fundamentals Saqib Hayat 1	L U N C H	English Composition and Comprehension - Lab Ehtasham-Ul-Haq 1 English Composition and Comprehension Muhammad Iqbal 1	English Composition and Comprehension - Lab Ehtasham-Ul-Haq 1
Tuesday		English Composition and Comprehension Sadia Ashfaq 1			English Composition and Comprehension - Lab Mah Rukh 1 English Composition and Comprehension Sadia Ashfaq 1	English Composition and Comprehension - Lab Mah Rukh 1
Wednesday	Introduction to Information and Communication Technology - Lab Muhammad Haseeb Arshad 1		Pakistan Studies Asif Naveed 1		English Composition and Comprehension Muhammad Iqbal 1	
Thursday	Applied Physics Waheed Ahmad 1		Programming Fundamentals - Lab Umar Naseer 1		Programming Fundamentals - Lab Umar Naseer 1	
Friday	Programming Fundamentals Saqib Hayat 1	Applied Physics Waheed Ahmad 1	Calculus and Analytical Geometry Dr. Mushtaq Ahmad 1		Calculus and Analytical Geometry Dr. Mushtaq Ahmad 1	Pakistan Studies Asif Naveed 1

# CS-3A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Computer Organization and Assembly Language Abdul Qadeer Bilal	Computer Organization and Assembly Language - Lab Abuzar Ghafari Finance & Accounting Agha Mureed Ahmad Khan	Computer Organization and Assembly Language - Lab Abuzar Ghafari Digital Logic Design Muhammad Irfan Ishaq Discrete Structures Dr. Muhammad Ahmad	L U N C H	Object Oriented Programming - Lab Muhammad Hannan Farooq Data Structures Muhammad Husnain	Object Oriented Programming - Lab Muhammad Hannan Farooq
Tuesday		Computer Organization and Assembly Language Abdul Qadeer Bilal	Data Structures - Lab Saba Aslam Calculus and Analytical Geometry Bushra Niaz		Data Structures - Lab Saba Aslam	Applied Physics Muhammad Mohsin Hameed
Wednesday					Data Structures Muhammad Husnain Object Oriented Programming Shoaib Saleem	Applied Physics Muhammad Mohsin Hameed
Thursday	Differential Equations Arfan Shahzad Linear Algebra Ghilmana Sarmad		Linear Algebra Ghilmana Sarmad		Discrete Structures Dr. Muhammad Ahmad	Differential Equations Arfan Shahzad Object Oriented Programming Shoaib Saleem
Friday		Calculus and Analytical Geometry Bushra Niaz	Digital Logic Design Muhammad Irfan Ishaq			Finance & Accounting Agha Mureed Ahmad Khan

# CS-3B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Object Oriented Programming - Lab Muhammad Hannan Farooq		Object Oriented Programming Dr Usman Habib	L U N C H	Computer Orgnaization and Assembly Language - Lab Ali Raza	
Tuesday		Discrete Structures Dr. Muhammad Ahmad			Data Structures - Lab Muhammad Hannan Farooq	
Wednesday	Differential Equations Arfan Shahzad					
Thursday	Object Oriented Programming Dr Usman Habib					Fundamentals of Management Muhammad Tayyeb Riaz
Friday	Computer Organization and Assembly Language Abdul Qadeer Bilal		Fundamentals of Management Muhammad Tayyeb Riaz		Discrete Structures Dr. Muhammad Ahmad	



# CS-3C

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Marketing Management Syed Zeeshan Haider <sup>1</sup>			L U N C H		
Tuesday		Differential Equations Arfan Shahzad <sup>1</sup>			Computer Orgnaization and Assembly Language - Lab Ali Raza <sup>1</sup>	
Wednesday	Differential Equations Arfan Shahzad <sup>1</sup>				Data Structures Dr. Hashim Yasin <sup>1</sup>	
Thursday	Data Structures - Lab Mughees Ismail <sup>1</sup>				Data Structures Dr. Hashim Yasin <sup>1</sup>	
Friday						Marketing Management Syed Zeeshan Haider <sup>1</sup>

# CS-3D

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Differential Equations Muhammad Waqas Javed <sup>1</sup>			L U N C H		
Tuesday	Data Structures Muhammad Usman Joyia <sup>1</sup>				Discrete Structures Usman Ghous <sup>1</sup>	
Wednesday	Discrete Structures Usman Ghous <sup>1</sup>	Differential Equations Muhammad Waqas Javed <sup>1</sup>	Data Structures - Lab Saba Aslam <sup>1</sup>		Data Structures - Lab Saba Aslam <sup>1</sup>	
Thursday	Computer Orgnaization and Assembly Language - Lab Ali Raza <sup>1</sup>					Marketing Management Syed Zeeshan Haider <sup>1</sup>
Friday		Marketing Management Syed Zeeshan Haider <sup>1</sup>				

# CS-3E

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Finance & Accounting Agha Mureed Ahmad Khan <sup>1</sup>		Computer Organization and Assembly Language - Lab Abuzar Ghafari <sup>1</sup>	L U N C H	Computer Organization and Assembly Language - Lab Abuzar Ghafari <sup>1</sup>	
Tuesday		Differential Equations Hayat Ali <sup>1</sup>			Finance & Accounting Agha Mureed Ahmad Khan <sup>1</sup>	
Wednesday	Differential Equations Hayat Ali <sup>1</sup>					
Thursday						
Friday						

# CS-5A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Software Design and Analysis Dr. Muhammad Bilal <sup>1</sup>	Computer Networks - Lab Ayesha Liaqat <sup>1</sup>	L U N C H	Computer Networks - Lab Ayesha Liaqat <sup>1</sup>	Computer Networks Masood Habib <sup>1</sup>
Tuesday		Web Programming Muhammad Shahrose Khan <sup>1</sup>	Theory of Automata Anmol Bilal <sup>1</sup>		Theory of Automata Anmol Bilal <sup>1</sup>	
Wednesday						
Thursday	Probability and Statistics Haris Khurram <sup>1</sup>				Web Programming Muhammad Shahrose Khan <sup>1</sup>	Software Design and Analysis Dr. Muhammad Bilal <sup>1</sup>
Friday		Probability and Statistics Haris Khurram <sup>1</sup>	Computer Networks Masood Habib <sup>1</sup>			

# CS-5B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Software Design and Analysis Dr. Muhammad Bilal <sup>1</sup>			L U N C H	Computer Networks Dr. Bilal Khan <sup>1</sup>	Marketing Management Hafiz MZeeshan Raza <sup>1</sup>
Tuesday	Web Programming Muhammad Shahrose Khan <sup>1</sup>				Software Design and Analysis Dr. Muhammad Bilal <sup>1</sup>	
Wednesday		Theory of Automata Anmol Bilal <sup>1</sup>	Computer Networks - Lab Ayesha Liaqat <sup>1</sup>		Computer Networks - Lab Ayesha Liaqat <sup>1</sup>	Theory of Automata Anmol Bilal <sup>1</sup>
Thursday			Web Programming Muhammad Shahrose Khan <sup>1</sup>			Marketing Management Hafiz MZeeshan Raza <sup>1</sup>
Friday			Computer Networks Dr. Bilal Khan <sup>1</sup>			

# CS-5C

Day/Period	I	II	III	1:15-1:45	IV	V
Monday			<b>Probability and Statistics</b> <b>Haris Khurram</b>	<b>L U N C H</b>		<b>Advanced Programming</b> <b>Awais Azam</b>
Tuesday	<b>Computer Networks - Lab</b> <b>Sumaira Mustafa</b>				<b>Computer Networks</b> <b>Dr. Bilal Khan</b>	
Wednesday		<b>Theory of Automata</b> <b>Numan Shafi</b>			<b>Theory of Automata</b> <b>Numan Shafi</b>	
Thursday	<b>Advanced Programming</b> <b>Awais Azam</b>	<b>Computer Networks</b> <b>Dr. Bilal Khan</b>	<b>Probability and Statistics</b> <b>Haris Khurram</b>			
Friday			<b>Software Design and Analysis</b> <b>Dr. Uzair Iqbal</b>			<b>Software Design and Analysis</b> <b>Dr. Uzair Iqbal</b>

# CS-5D

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Psychology Aisha Bano	Design and Analysis of Algorithms Shoaib Saleem		L U N C H		
Tuesday	Discrete Structures Usman Ghous	Database Systems Saqib Hayat			Database Systems - Lab Saqib Hayat	
Wednesday		Operating System Usman Ghous	Theory of Automata Numan Shafi			Discrete Structures Usman Ghous Operating System Usman Ghous
Thursday		Design and Analysis of Algorithms Shoaib Saleem	Psychology Aisha Bano		Operating Systems - Lab Muhammad Haseeb Arshad	
Friday	Database Systems Saqib Hayat	Theory of Automata Numan Shafi				

# CS-5E

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Design and Analysis of Algorithms Shoaib Saleem1		L U N C H	Psychology Aisha Bano1	
Tuesday	Database Systems - Lab Muhammad Shahrose Khan1	Database Systems - Lab Muhammad Shahrose Khan1			Theory of Automata Numan Shafi1	Database Systems Aliza Saeed1
	Database Systems Aliza Saeed1	Theory of Automata Numan Shafi1				
Wednesday						
Thursday		Operating Systems - Lab Muhammad Yousaf1				
Friday			Design and Analysis of Algorithms Shoaib Saleem1			



# CS-7A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Professional Practices in IT Rizwan ul Haq 1		L U N C H	Data Science Adeel Ashraf Cheema 1	
Tuesday	Data Mining Dr. Rabia Maqsood 1	Information Security Dr. Danish Shehzad 1				
Wednesday			Software Engineering Awais Azam 1		Information Security Dr. Danish Shehzad 1	Professional Practices in IT Rizwan ul Haq 1
Thursday	Data Science Adeel Ashraf Cheema 1	Software Engineering Awais Azam 1	Artificial Intelligence - Lab Saba Aslam 1		Artificial Intelligence - Lab Saba Aslam 1	
Friday	Artificial Intelligence Dr. Shahnawaz Qureshi 1				Artificial Intelligence Dr. Shahnawaz Qureshi 1	Data Mining Dr. Rabia Maqsood 1

# CS-7B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday			Data Science Adeel Ashraf Cheema <sup>1</sup>	L U N C H		Data Science Adeel Ashraf Cheema <sup>1</sup>
Tuesday	Software Engineering Awais Azam <sup>1</sup>				Information Security Dr. Danish Shehzad <sup>1</sup>	
Wednesday	Data Mining Nasreen Akhtar <sup>1</sup>					Data Mining Nasreen Akhtar <sup>1</sup>
Thursday	Professional Practices in IT Masood Habib <sup>1</sup>					Professional Practices in IT Masood Habib <sup>1</sup>
Friday	Information Security Dr. Danish Shehzad <sup>1</sup>					Software Engineering Awais Azam <sup>1</sup>

# CS-7C

Day/Period	I	II	III	1:15-1:45	IV	V
Monday			Applied Machine Learning Dr. Hashim Yasin 1	L U N C H		
Tuesday						
Wednesday		Professional Practices in IT Masood Habib 1				
Thursday	Software for Mobile Devices - Lab Tahir Farooq 1		Applied Machine Learning Dr. Hashim Yasin 1			
Friday	Information Security Dr. Irfan ul Haq 1				Professional Practices in IT Masood Habib 1	Information Security Dr. Irfan ul Haq 1

# CS-7D

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Applied Machine Learning Dr. Hashim Yasin 1		L U N C H		
Tuesday			Software for Mobile Devices - Lab Tahir Farooq 1		Software for Mobile Devices - Lab Tahir Farooq 1	
Wednesday		Information Security Dr. Muhammad Umar Aftab 1	Professional Practices in IT Tehreem Aslam 1			Professional Practices in IT Tehreem Aslam 1
Thursday		Applied Machine Learning Dr. Hashim Yasin 1				Information Security Dr. Muhammad Umar Aftab 1
Friday						

# CS-7E

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Software Testing Dr. Uzair Iqbal	Professional Practices in IT Tehreem Aslam	L U N C H		
Tuesday	Software Testing Dr. Uzair Iqbal		Information Security Dr. Muhammad Umar Aftab			
Wednesday						
Thursday	Fundamentals of Software Project Management Dr. Muhammad Bilal				Fundamentals of Software Project Management Dr. Muhammad Bilal	
Friday			Professional Practices in IT Tehreem Aslam		Information Security Dr. Muhammad Umar Aftab	

CS-7F

Day/Period	I	II	III	1:15-1:45	IV	V
Monday				L U N C H		
Tuesday					Remote Sensing and GIS <sup>1</sup> Dr M. Shahzad Sarfraz	
Wednesday	Remote Sensing and GIS <sup>1</sup> Dr M. Shahzad Sarfraz	Software Testing <sup>1</sup> Dr. Uzair Iqbal				
Thursday						
Friday	Software Testing <sup>1</sup> Dr. Uzair Iqbal					

CS-9A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Computer Architecture Muhammad Usman Joyia <sup>1</sup>			L U N C H		
Tuesday	Software for Mobile Devices - Lab No-Teacher <sup>1</sup>					
Wednesday						
Thursday						
Friday					Computer Architecture Muhammad Usman Joyia <sup>1</sup>	

# SE-1A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	English Composition and Comprehension - Lab Muhammad Ammar		English Composition and Comprehension - Lab Ehtasham-Ul-Haq	L U N C H	English Composition and Comprehension - Lab Ehtasham-Ul-Haq	Pakistan Studies Asma Yaqoob
Tuesday			English Composition and Comprehension Sadia Ashfaq		Applied Physics Waheed Ahmad	English Composition and Comprehension Farah Iqbal
Wednesday	Programming Fundamentals - Lab Sumaira Mustafa		English Composition and Comprehension Farah Iqbal		English Composition and Comprehension Sadia Ashfaq	Programming Fundamentals Sumaira Mustafa
Thursday	Introduction to Information and Communication Technology - Lab Umar Naseer		Applied Physics Waheed Ahmad		Pakistan Studies Asma Yaqoob	
Friday			Calculus and Analytical Geometry Bushra Niaz		Programming Fundamentals Sumaira Mustafa	Calculus and Analytical Geometry Bushra Niaz



# SE-1B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Programming Fundamentals Aliza Saeed	Introduction to Information and Communication Technology - Lab Muhammad Haseeb Arshad		L U N C H	Calculus and Analytical Geometry Bushra Niaz	Programming Fundamentals Aliza Saeed
Tuesday	Applied Physics Dr. Arslan Ahmed Amin	English Composition and Comprehension Rida Akram			Programming Fundamentals - Lab Aliza Saeed	
Wednesday	Pakistan Studies Zainab Javeed	English Composition and Comprehension - Lab Sadia Ashfaq			Pakistan Studies Zainab Javeed	
Thursday	English Composition and Comprehension - Lab Farah Iqbal	English Composition and Comprehension - Lab Farah Iqbal English Composition and Comprehension Muhammad Iqbal	Calculus and Analytical Geometry Bushra Niaz		English Composition and Comprehension Muhammad Iqbal	Applied Physics Dr. Arslan Ahmed Amin
Friday					English Composition and Comprehension Rida Akram	

# SE-3A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Marketing Management Hafiz MZeeshan Raza 1	Linear Algebra Ghilmana Sarmad 1	L U N C H	Data Structures Muhammad Usman Joyia 1	Marketing Management Hafiz MZeeshan Raza 1
Tuesday		Human Computer Interaction Dr. Shahnawaz Qureshi 1			Data Structures - Lab Aqsa Younas 1	
Wednesday			Object Oriented Programming - Lab Muhammad Yousaf 1		Object Oriented Programming - Lab Muhammad Yousaf 1	Human Computer Interaction Dr. Shahnawaz Qureshi 1
Thursday	Software Requirement Engineering Pariwish Touseef 1					
Friday	Software Requirement Engineering Pariwish Touseef 1	Linear Algebra Ghilmana Sarmad 1	Object Oriented Programming Dr Usman Habib 1			Data Structures Muhammad Usman Joyia 1 Object Oriented Programming Dr Usman Habib 1

# SE-3B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Data Structures - Lab Asif Ameer		L U N C H		Human Computer Interaction Dr. Shahnawaz Qureshi
Tuesday	Finance & Accounting Muhammad Nasif		Human Computer Interaction Dr. Shahnawaz Qureshi			
Wednesday			Software Requirement Engineering Pariwish Touseef			
Thursday	Data Structures Asif Ameer		Software Requirement Engineering Pariwish Touseef		Linear Algebra Ghilmana Sarmad	
Friday	Finance & Accounting Muhammad Nasif	Linear Algebra Ghilmana Sarmad				

# SE-5A

Day/Period	I	II	III	1:15-1:45	IV	V
Monday	Database Systems - Lab Nasreen Akhtar		Database Systems Nasreen Akhtar	L U N C H	Software Construction and Development - Lab Muhammad Azeem Iftikhar	
Tuesday	Software Quality Engineering Tehreem Aslam		Operation Research Dr. Muhammad Imran Babar Technical and Business Writing Muhammad Nouman Iftikhar		Database Systems Nasreen Akhtar	Probability and Statistics Haris Khurram
Wednesday		Operating Systems - Lab Muhammad Yousaf			Software Construction and Development Dr. Affan Rauf	Software Quality Engineering Tehreem Aslam
Thursday	Operating Systems Muhammad Husnain Operation Research Dr. Muhammad Imran Babar		Operating Systems Muhammad Husnain			
Friday	Software Construction and Development Dr. Affan Rauf		Technical and Business Writing Muhammad Nouman Iftikhar		Probability and Statistics Haris Khurram	

# SE-5B

Day/Period	I	II	III	1:15-1:45	IV	V
Monday		Technical and Business Writing Muhammad Nouman Iftikhar		L U N C H		
Tuesday	Operation Research Dr. Muhammad Imran Babar				Probability and Statistics Haris Khurram	
Wednesday	Software Quality Engineering Abdul Qadeer Bilal					
Thursday	Technical and Business Writing Muhammad Nouman Iftikhar	Software Construction and Development Dr. Affan Rauf			Software Construction and Development - Lab Muhammad Azeem Iftikhar	
Friday	Operation Research Dr. Muhammad Imran Babar	Software Construction and Development Dr. Affan Rauf				Probability and Statistics