## **Study Plan For Networks Department**

Course#   Course Title   Pre-Req.   Cr.   Course   Gill1   Programming I     3   Gill2   Programming II   Gill2   IT Foundations     3   Gill2   Digital and Logic Design   Gill2   Intro to Statistics & Probability     3   Gill2   Digital and Logic Design   Gill3   General Physics     3   Gill2   English Language II   Gill1   English Language II     2   SE121   Software Engineering   Gill2   Arabic Language     2   Semester 1, Year 2   Semester 2, Year 2	Pre-Req. GI111 GS111 GS111 GS111 GS111 GI112 Pre-Req. GI121 IN211 GI213 GS121	Cr. 3 3 3 2 3 Cr. 3 3 3 3
Course   C	Req. GI111 GI112 GS111 GS111 GH111 GI112  Pre- Req. GI121 IN211 GI213	3 3 3 2 3 Cr.
GI112 IT Foundations 3 GI122 Digital and Logic Design  GS111 Math I 3 GS121 Math II  GS112 Intro to Statistics & Probability 3 GI123 Discrete Mathematics  GS113 General Physics 3 GH121 English Language II  GH111 English Language I 2 SE121 Software Engineering  GH112 Arabic Language 2  Total = 19  Total = 17  Semester 1, Year 2  Semester 2, Year 2  Course# Course Title Pre-Req. Cr. Course #  GI211 Data Structures and Algorithms GI121 3 GI221 Object Oriented Programming  GI212 Database Systems GI123 3 GI222 Security Principles and Practiceces  GS211 Linear Algebra GS121 3 GI223 Operating systems  GI213 Computer Architecture GI122 3 GS221 Numerical Analysis  IN211 Internet Technologies GI112 3 CN221 Prenciples of Communication Systems	GI112 GS111 GS111 GH111 GI112  Pre- Req. GI121 IN211 GI213	3 3 2 3 Cr.
GS111   Math I	GS111 GS111 GH111 GI112  Pre- Req. GI121 IN211 GI213	3 2 3 Cr.
GS113 General Physics 3 GH121 English Language II  GH111 English Language I 2 SE121 Software Engineering  GH112 Arabic Language 2  Total = 19  Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms  GI212 Database Systems  GI212 Database Systems  GI213 Computer Architecture  GI213 Computer Architecture  GI210 Internet Technologies  GI111 GI112 GI212 GI221 Operating systems  GI212 GI223 Operating systems  GI213 CN221 Prenciples of Communication Systems  GI112 GI	GS111 GH111 GI112  Pre- Req. GI121 IN211 GI213	3 2 3 Cr.
GS113 General Physics 3 GH121 English Language II  GH111 English Language I 2 SE121 Software Engineering  GH112 Arabic Language 2  Total = 19  Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms  GI212 Database Systems  GI212 Database Systems  GI213 Computer Architecture  GI213 Computer Architecture  IN211 Internet Technologies  GI112 3 GH21 Physics Language II  Total = 17  Semester 2, Year 2  Course #  Course Title  GI212 Object Oriented Programming  GI212 Security Principles and Practicees  GS211 Linear Algebra  GI213 Computer Architecture  GI122 3 GS221 Numerical Analysis  Prenciples of Communication Systems  GI112 3 CN221 Prenciples of Communication Systems	GH111 GI112  Pre- Req. GI121 IN211 GI213	2 3 Cr.
GS113 General Physics 3 GH121 English Language II  GH111 English Language I 2 SE121 Software Engineering  GH112 Arabic Language 2  Total = 19  Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms  GI212 Database Systems  GI212 Database Systems  GI213 Computer Architecture  GI213 Computer Architecture  GI210 Internet Technologies  GI111 GI112 GI212 GI221 Operating systems  GI212 GI223 Operating systems  GI213 CN221 Prenciples of Communication Systems  GI112 GI	GI112  Pre- Req. GI121 IN211 GI213	3 Cr. 3
GH112 Arabic Language 2  Total = 19  Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms GI212 Database Systems GI212 Database Systems GI213 Computer Architecture GI213 Computer Architecture GI214 Internet Technologies  GI215 GI216 GI127 GI127 GI128 GI228	Pre- Req. GI121 IN211 GI213	<b>Cr.</b> 3
Total = 19  Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms GI212 Database Systems GS211 Linear Algebra GI213 Computer Architecture GI213 Internet Technologies  GI120 Database Systems GI121 GI220 GI221 Object Oriented Programming GI212 GI220 Operating systems GI212 GI221 Operating systems GI213 GI221 Operating systems GI213 GI221 Operating systems GI213 GI221 Operating systems GI213 GI222 GI223 Operating systems GI213 GI223 Operating systems GI213 GI223 Operating systems GI213 Computer Architecture GI220 GI221 GI221 Operating systems GI221 Operating systems GI222 GI222 Operating systems GI223 Operating systems GI223 Operating systems GI223 Operating systems	Req. GI121 IN211 GI213	3
Semester 1, Year 2  Course# Course Title  GI211 Data Structures and Algorithms  GI212 Database Systems  GI213 Computer Architecture  GI213 Computer Architecture  GI214 Internet Technologies  GI125 Semester 2, Year 2  Cr. Course #  GI221 Object Oriented Programming  GI222 Security Principles and Practicees  GS211 Linear Algebra  GI223 GS221 Numerical Analysis  Prenciples of Communication  Systems	Req. GI121 IN211 GI213	3
Course# Course Title  Fre-Req.  GI211 Data Structures and Algorithms  GI212 Database Systems  GI212 Database Systems  GI213 GI221 Object Oriented Programming  GI212 Database Systems  GI213 GS211 Linear Algebra  GI213 Computer Architecture  GI213 Computer Architecture  GI212 GS211 Internet Technologies  GI212 GS221 Numerical Analysis  GI213 GS221 Prenciples of Communication Systems	Req. GI121 IN211 GI213	3
GI211 Data Structures and Algorithms GI212 Database Systems GI213 GI221 Object Oriented Programming GI212 Database Systems GI213 GI222 Security Principles and Practicees GS211 Linear Algebra GI213 Computer Architecture GI212 GI213 GS221 Numerical Analysis IN211 Internet Technologies GI112 GI112 GN221 Prenciples of Communication Systems	Req. GI121 IN211 GI213	3
GI212 Database Systems GI212 Security Principles and Practicese GS211 Linear Algebra GS211 Security Principles and Practicese GS211 Computer Architecture GI122 GS221 Numerical Analysis IN211 Internet Technologies GI112 GI112 GCN221 Prenciples of Communication Systems	IN211 GI213	
GS211 Linear Algebra GS121 3 GI223 Operating systems  GI213 Computer Architecture GI122 3 GS221 Numerical Analysis  IN211 Internet Technologies GI112 3 CN221 Prenciples of Communication Systems	GI213	3
IN211 Internet Technologies GI112 3 CN221 Systems		ر
IN211 Internet Technologies GI112 3 CN221 Systems	GS121	3
IN211 Internet Technologies GI112 3 CN221 Systems		3
CN211 Intro to Computer Networks GI112 3 CN222 Advanced Computer Networks	GS113	3
CN211 Initio to Computer Networks G1112 5 CN222 Advanced Computer Networks	CN211	3
Total =   18   Total =   18		
Semester 1, Year 3 Semester 2, Year 3		
Course # Course Title Pre-Req. Cr. Course # Course Title	Pre- Req.	Cr.
GI311 Information systems SE121 3 GH321 Research Methodology		3
GI312 Artificial Intelligence GI211 3 GI321 Project Management		3
CN311 Network Programming CN222, GI221 3 CN321 Wireless Ad-hoc and Sensor Networks  CN312 Wireless Networks  CN312 CN312 Wireless Networks  CN221&CN222 3 CN322 Network Modeling and Simulation	CN312	3
CN312 Wireless Networks CN221&CN222 3 CN322 Network Modeling and Simulation	CN222 CN312	3
CN313 Network Operating Systems GI223 3 CN323 Network Lab	CN312	1
CN314 Network Security GI222 & CN222 4 CS321 Distributed Systems	GI212	3
Total =   19   Total =   16		
Semester 1, Year 4 Semester 2, Year 4		
Course # Course Title Pre-Req. Cr. Course # Course Title	Pre- Req.	Cr.
CN411 Network Perfromance Analyses and Evalution CN322 3 CN421 Network Planning and Deployment		3
CN412 Network Management CN 313 4 Elective Course II CN413 Converged Networks CN321 3 Elective Course II		3
CN413 Converged Networks CN321 3 Elective Course II		3
Elective Course I	107 Credits	4
GI411 Group Project Pass 99 units 3		
Total =   16   Total =   15		
Total Number of Credits Achieved =   138   Credits		
Total dept. credits = 75 Credits		
Total external credits = 63 Credits		