

Johnson High School



Career and Technical Education Electives 2024-2025

To earn a CTE Pathway: A Student completing and passing three or more CTE courses for a total of four or more credits within a program of study.

Student must pass an Industry Based Certification (IBC)

Business & Industry Endorsement

Architectural Design Pathway

| Level | Course # | Course Name | Grades | Credit |
|---------|-------------|---|--------|---------|
| | H6647 | Principles of Architecture | 9-12 | 1.0 |
| 2 | H8245 | Architectural Design I (Prerequisite: Principles of Architecture) | 9-12 | 1.0 |
| <u></u> | H8246 | Architectural Design II (Prerequisite: Architectural Design I) | 10-12 | 2.0 |
| | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Autodesk Associate User IBC / Entrepreneurship & Small Business IBC

Digital Communications Pathway

| Level | Course # | Course Name | Grades | Credit |
|-------|-------------|--|--------|---------|
| 1 | M3020 | Principles of Arts, A/V, & Communication (Offered at Hill & Tejeda) | 8 | 1.0 |
| 1 | H6656 | Principles of Arts, A/V, & Communication | 9-12 | 1.0 |
| 2 | H6731 | Audio/Video Production I (Prerequisite: Princ. of A/V) | 9-12 | 1.0 |
| 3 | H6742 | Audio/Video Production II w/ Lab (Prerequisite: A/V Prod. I) | 10-12 | 2.0 |
| 4 | H6761 | Practicum in Audio/Video Production (Prerequisite: AV Prod II or AV Prod II lab) | 11-12 | 2.0 |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Adobe Certified Professional IBC / Entrepreneurship & Small Business IBC

Graphic Design & Interactive Media Pathway

| Level | Course # | Course Name | Grades | Credit |
|---------|-------------|---|--------|---------|
| 1 | . M3020 | Principles of Arts, A/V, & Communication (Offered at Hill, & Tejeda) | 8 | 1.0 |
| 1 | H6656 | Principles of Arts, A/V, & Communication | 9-12 | 1.0 |
| 2 | H6711 | Animation I (Prerequisite: Prin. of A/V) | 10-12 | 1.0 |
| 2 | H8015 | Fashion Design I (Prerequisite: Principles of Arts, A/V Technology) | 10-12 | 1.0 |
| 3 | H6749 | Fashion Design II W/ Lab (Prerequisite: Fashion Design I, Must be taken concurrently W/ Fashion Design II. May not be taken as a stand alone course.) | 11-12 | 2.0 |
| 3 | H6713 | Animation II (Prerequisite: Animation I) | 11-12 | 1.0 |
| <u></u> | H8312 | Practicum in Entrepreneurship (Prerequisite: Completion of at least two courses in a CTE program of study.) | 11-12 | 2.0 |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Adobe Certified Professional IBC / Entrepreneurship & Small Business IBC

Accounting & Finance Services Pathway

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|------------------|--|---|--------|---------|--|
| Level | Course # | Course Name | Grades | Credit | |
| 1 | H8290 | Principles of Business, Marketing & Finance | 9-12 | 1.0 | |
| 1 | H8291 | Business Info. Management I | 9-12 | 1.0 | |
| 2 | H8301 | Accounting I (Prerequisite: Prin. of BMF) | 10-12 | 1.0 | |
| 2 | H8291 | Banking & Financial Services (Prerequisite: Prin. of BMF) | 10-12 | 0.5 | |
| 3 | H8302 | Accounting II (Prerequisite: Acct. I) (Math credit) | 11-12 | 1.0 | |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 | |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 | |

Certification earned: Intuit Quickbooks Certified User IBC, Volunteer Income Tax Assistance/Tax, Counseling IBC /

Business Management Pathway

| Level | Course # | Course Name | Grades | Credit |
|----------|-------------|---|--------|---------|
| 1 | H8290 | Principles of Business, Marketing & Finance | 9-12 | 1.0 |
| 1 | H8291 | Business Info. Management I | 9-12 | 1.0 |
| 2 | H8292 | Business Info. Management II (Prerequisite: BIM I) | 10-12 | 1.0 |
| <u></u> | H8294 | Business Management (Prerequisite: Prin. of BMF) | 11-12 | 1.0 |
| A | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Microsoft Office Expert Excel, Word IBC /
Entrepreneurship & Small Business IBC

Marketing & Sales Pathway

| Level | Course # | Course Name | Grades | Credit |
|-------|-------------|--|--------|---------|
| 1 | H8290 | Principles of Business, Marketing & Finance | 9-12 | 1.0 |
| 2 | H8304 | Sports & Entertainment Marketing I (Prerequisite: Prin. of BMF) | 9-12 | 0.5 |
| 2 | H8014 | Fashion Marketing (Prerequisite: Prin. of BMF) | 9-12 | 0.5 |
| 3 | H8313 | Sports & Entertainment Marketing II (Prerequisite: Prin. of BMF) | 9-12 | 0.5 |
| 3 | H8700 | Fundamentals of Real Estate (Prerequisite: Prin. of BIM & ONE Full year credit of a Level 2 or Level 3 Course) | 11-12 | 2.0 |
| 3 | H6769 | Social Media Marketing (Prerequisite: Prin. of BMF) | 9-12 | 0.5 |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Stukent Social Media Marketing IBC / Entrepreneurship & Small Business IBC

Public Service Endorsement

Diagnostic & Therapeutic Services Pathway

| Level | Course # | Course Name | Grades | Credit |
|----------|----------|---|--------|--------|
| 1 | H8340 | Principles of Health Sciences | 9-12 | 1.0 |
| 2 | H6757 | Medical Terminology (Prerequisites: Prin. of Health Science) | 9-12 | 1.0 |
| 3 | H3253 | Anatomy & Physiology (Science credit) (Prerequisites: one credit in Biology, and one credit in Chemistry, IPC, or Physics.) (Recommended: One credit from the Health Sci. Pathway.) | 10-12 | 1.0 |
| 3 | H8344 | Health Science Theory (Prerequisites: Biology, & at least one credit in a course from the Health Sci. career cluster.) | 10-12 | 1.0 |
| 3 | H6758 | Medical Microbiology (Prerequisites: Biology, Chemistry & at least one credit in a course from the Health Sci. career cluster. | 10-12 | 1.0 |
| <u>"</u> | H8346 | Health Science Clinical (Prerequisites: Principles of Health Science, Medical Terminology, Biology, and Health Science Theory.) | 11-12 | 2.0 |

Certification earned: Phlebotomy Technician IBC

Nursing Science Pathway

| Hursing Science I uniway | | | | | | |
|--------------------------|----------|---|--------|--------|--|--|
| Level | Course # | Course Name | Grades | Credit | | |
| , | H8340 | Principles of Health Sciences | 9-12 | 1.0 | | |
| : | H6757 | Medical Terminology (Prerequisites: Prin. of Health Science) | 9-12 | 1.0 | | |
| ; | H3253 | Anatomy & Physiology (Science credit) (Prerequisites: one credit in Biology, and one credit in Chemistry, IPC, or Physics.) | 10-12 | 1.0 | | |
| ; | H8344 | Health Science Theory (Prerequisites: Biology, & at least one credit in a course from the Health Sci. career cluster.) | 10-12 | 1.0 | | |
| ; | H6758 | Medical Microbiology (Prerequisites: Biology, Chemistry & at least one credit in a course from the Health Sci. career cluster. | 10-12 | 1.0 | | |
| , : | H8346 | Health Science Clinical (Prerequisites: Principles of Health Science, Medical Terminology, Biology, and Health Science Theory.) | 11-12 | 2.0 | | |

Certification earned: Phlebotomy Technician IBC

Teaching & Training Pathway

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|---|--|----------|-------------|--------|--------|---|
| I | Level | Course # | Course Name | Grades | Credit | ١ |

| 1 | M3045 | Principles of Education & Training (Offered at Tejeda) | 7-8 | 1.0 |
|-----|-------------|--|-------|---------|
| 1 | M3016 | Principles of Human Services (Offered at Hill, & Tejeda) | 7-8 | 1.0 |
| 1 | H6721 | Principles of Human Services | 9-12 | 1.0 |
| 2 | H6764 | Child Development (Prerequisite: Prin. of Human Serv. Or Educ. & Training) | 9-12 | 1.0 |
| 3 | H8084 | Ready, Set, Teach I (Prerequisite: Prin. of Human Serv. Or Educ. & Training) | 11-12 | 2.0 |
| , 4 | H8043 | Ready, Set, Teach II (Prerequisite: RST I) | 12 | 2.0 |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Pre-Professional Certification in Early Childhood Education IBC, Education Aide Level 1 IBC / Entrepreneurship & Small Business IBC

Family & Community Services Pathway

| Level | Course # | Course Name | Grades | Credit |
|------------|-------------|--|--------|---------|
| 1 | M3016 | Principles of Human Services (Offered at Hill, & Tejeda) | 7-8 | 1.0 |
| 1 | H6721 | Principles of Human Services | 9-12 | 1.0 |
| 1 | H8025 | Dollars & Sense (Prerequisite: Prin. of Human Serv.) | 11-12 | 0.5 |
| 2 | H8029 | Lifetime Nutrition & Wellness (Prerequisite: Prin. of Human Service, Prin. of Health Sci.) | 9-12 | 0.5 |
| <u>,</u> 2 | H6764 | Child Development (Prerequisite: Prin. of Human Serv. Or Educ. & Training) | 9-12 | 1.0 |
| 3 | H8345 | Counseling & Mental Health (Prerequisite: Prin. of Human Serv.) | 11-12 | 1.0 |
| 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| <u> </u> | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Pre-Professional Certification in Early Childhood Education IBC / Entrepreneurship & Small Business IBC

Health and Wellness Pathway

| Level | Course # | Course Name | Grades | Credit |
|----------|-------------|--|--------|---------|
| 1 | M3016 | Principles of Human Services (Offered at Hill, & Tejeda) | 7-8 | 1.0 |
| 1 | H6721 | Principles of Human Services | 9-12 | 1.0 |
| 1 | . H8025 | Dollars & Sense (Prerequisite: Prin. of Human Serv.) | 11-12 | 0.5 |
| 2 | H8029 | Lifetime Nutrition & Wellness (Prerequisite: Prin. of Human Service, Prin. of Health Sci.) | 9-12 | 0.5 |
| <u> </u> | H6764 | Child Development (Prerequisite: Prin. of Human Serv. Or Educ. & Training) | 9-12 | 1.0 |
| 3 | H8345 | Counseling & Mental Health (Prerequisite: Prin. of Human Serv.) | 11-12 | 1.0 |
| - 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: Pre-Professional Certification in Early Childhood Education IBC / Entrepreneurship & Small Business IBC

Law Enforcement Pathway

| Law Linorcement Famway | | | | | | |
|------------------------|-------------|---|--------|---------|--|--|
| Level | Course # | Course Name | Grades | Credit | | |
| 1 | H8410 | Principles of Law, Public Safety, Corrections, & Security | 9-12 | 1.0 | | |
| 2 | H8413 | Law Enforcement I (Prerequisite: Prin. of Law) | 10-12 | 1.0 | | |
| , ; | H8418 | Law Enforcement II (Prerequisite: Law Enforcement I) | 11-12 | 1.0 | | |
| 4 | H8414 | Forensic Science (Science Credit) (Prerequisites: Biology, Chemistry, IPC, or Physics.) | 11-12 | 1.0 | | |
| | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 | | |
| | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 | | |

Certification earned: Emergency Telecommunicator IBC

Engineering and Information Technology Endorsement

Engineering Foundations Pathway

| Le | vel | Course # | Course Name | Grades | Credit |
|----|-----|----------|---|--------|--------|
| | 1 | M3019 | Principles of Applied Engineering (Offered at Hill, & Tejeda) | 7-8 | 1.0 |
| | 1 | M3047 | Robotics I (Offered at Hill) | 7-8 | 1.0 |

| 1 | H8250 | Principles of Applied Engineering | 9-12 | 1.0 |
|------------|-------|---|-------|-----|
| 2 3 | | Engineering Design & Presentation I (Prerequisite: Prin of Applied Engineering , Algebra I) | 10-12 | 1.0 |
| A 4 | | Engineering Design & Presentation II (Prerequisites: Engineering Design & Presentation I, Algebra I, Geometry) | 11-12 | 2.0 |

Certification earned: Autodesk Associate Certified User IBC

Programming & Software Development

| Level | Course # | Course Name | Grades | Credit |
|-------|-------------|---|--------|---------|
| 1 | M3025 | Fundamentals of Computer Science (Offered at Hill, & Tejeda) | 7-8 | 1.0 |
| 2 | H3005 | Computer Science I - Honors (Prerequisite: Algebra I) | 9-12 | 1.0 |
| 2 | H3006 | Computer Science II-Honors (Prerequisite: Algebra I, Comp. Sci. I, or AP Computer Sci. Prin.) | 10-12 | 1.0 |
| 2 | H3007 | AP Computer Science Principles (Prerequisite: Algebra I) | 9-12 | 1.0 |
| | H3010 | AP Computer Science A (Prerequisite: Algebra I) | 10-12 | 1.0 |
| , 4 | H6745/H8310 | Career Preparation I/Extended Career Preparation I (10/15 hrs. Work week) | 11-12 | 2.0/3.0 |
| 4 | H6746/H8311 | Career Preparation II/Extended Career Preparation II (10/15 hrs. Work week) | 12 | 2.0/3.0 |

Certification earned: PCEP - Certified Entry-Level Python Programmer; Information Techology Specialist - JAVA / Entrepreneurship & Small Business IBC



CTEC

Career and Technical Education Center



Flectrical Pathway

| Electrical Patriway | | | | | | | |
|---------------------|-----------|-------------------------------------|--|--------|--------|--|--|
| Level | Course # | Course Name | | Grades | Credit | | |
| | 1 H6763Cx | Principles of Construction (Sem. 1) | | 9-12 | 1.0 | | |
| , | 1 H8154x | Electrical Technology I (Sem. 2) | | 9-12 | 1.0 | | |
| | 2 H8155x | Electrical Tech. II | | 10-12 | 2.0 | | |
| | 3 H8078x | Practicum in Construction Tech I | | 11-12 | 2.0 | | |
| | 4 H8166x | Practicum in Construction Tech II | | 12 | 2.0 | | |



Certification earned: NCCER Core IBC

Carpentry Pathway

| Level | Course # | Course Name | Grades | Credit | | | |
|-------|----------|-------------------------------------|--------|--------|--|--|--|
| 1 | H6763Cx | Principles of Construction (Sem. 1) | 9-12 | 1.0 | | | |
| 1 | H8243x | Construction Tech. I (Sem. 2) | 9-12 | 2.0 | | | |
| 2 | H8244x | Construction Tech. II | 10-12 | 2.0 | | | |
| 3 | H8078x | Practicum in Construction Tech I | 11-12 | 2.0 | | | |
| 4 | H8166x | Practicum in Construction Tech II | 12 | 2.0 | | | |



Certification earned: NCCER Core IBC / NCEER Carpentry Level 1 IBC / NCCER Carpentry Level 2 IBC

HVAC Pathway

| Level | | Course # | Course Name | Grades | Credit |
|-------|---|----------|-------------------------------------|--------|--------|
| | 1 | H6763Cx | Principles of Construction (Sem. 1) | 9-12 | 1.0 |
| | 1 | H8249x | HVAC Technology I (Sem. 2) | 9-12 | 1.0 |
| 7 | 2 | H8295x | HVAC Technology II | 10-12 | 2.0 |
| | 3 | H8078x | Practicum in Construction Tech I | 11-12 | 2.0 |
| | 4 | H8166x | Practicum in Construction Tech II | 12 | 2.0 |



Certification earned: NCCER Core IBC / Refrigerant Handiling (EPA 608) IBC

Plumbing Pathway

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|---------------------------------------|-----------|-------------------------------------|---|-------|--------|--|--|
| Level | Course # | Course Name | G | rades | Credit | | |
| | 1 H6763Cx | Principles of Construction (Sem. 1) | | 9-12 | 1.0 | | |
| 7 7 | 1 H8241x | Plumbing Technology I (Sem. 2) | | 9-12 | 1.0 | | |

| 2 | H8242x | Plumbing Technology II | 10-12 | 2.0 |
|---|--------|-----------------------------------|-------|-----|
| 3 | H8078x | Practicum in Construction Tech I | 11-12 | 2.0 |
| 4 | H8166x | Practicum in Construction Tech II | 12 | 2.0 |



Certification earned: NCCER Core IBC

Welding Pathway

| Level | | Course # | Course Name | Grades | Credit |
|-------|---|----------|----------------------------------|--------|--------|
| | 1 | H8173x | Introduction to Welding (Sem. 1) | 9-12 | 1.0 |
| | 1 | H8174x | Welding Technology I (Sem. 2) | 9-12 | 2.0 |
| - 💂 | 2 | H8175x | Welding Technology II | 10-12 | 2.0 |
| | 3 | H8179x | Practicum in Welding I | 11-12 | 2.0 |
| | 4 | H8180x | Practicum in Welding II | 12 | 2.0 |



Certification earned: NCCER Core IBC / AWS D1.1 Sheet Metal Welding IBC / AWS D9.1 Sheet Metal Welding IBC

Diagnostic & Therapeutic Services Pathway

| Level | Course # | Course Name | Grades | Credit |
|-------|----------|---|--------|--------|
| 1 | H8340 | Principles of Health Science | 9-12 | 1.0 |
| 2 | H6757 | Medical Terminology (Prerequisites: Prin. of Health Science) | 9-12 | 1.0 |
| 3 | H3253 | Anatomy & Physiology (Science credit) (Prerequisites: one credit in Biology, and one credit in Chemistry, IPC, or Physics.) (Recommended: One credit from the Health Sci. Pathway.) | 10-12 | 1.0 |
| 3 | H8392 | Dental Anatomy & Physiology (Dental A) (Sem. 1) | 11-12 | 1.0 |
| 3 | H8390 | Dental Equipment & Proc. (Dental B) (Sem. 2) | 12 | 1.0 |
| 3 | H8344 | Health Science Theory (Prerequisites: Biology, & at least one credit in a course from the Health Sci. career cluster.) | 10-12 | 1.0 |
| 3 | H8346 | Health Science Clinicals | 9-12 | 2.0 |
| | H6758 | Medical Microbiology (Prerequisites: Biology, Chemistry & at least one credit in a course from the Health Sci. career cluster. | 10-12 | 1.0 |
| - 4 | H8360 | Certified Medical Assistant | 11-12 | 2.0 |
| 4 | H8354 | Emergency Medical Technician | 12 | 2.0 |
| 4 | H6759 | Pathophysiology (Science credit) (Prerequisites: Biology and Chemistry; And 1 credit in a Level 2 or higher from the Health Science career cluster) | 11-12 | 2.0 |
| 4 | H3254 | Pharmacy Technician | 9-12 | 2.0 |

Certification earned: Registered Dental Asst. X-Ray IBC / Phlebotomy Technician IBC / Certified Clinical Medical Asst. IBC /

Emergency Medical Technician IBC / Pharmacy Technician IBC

Automotive & Collision Repair Pathway

| Level | Course # | Course Name | Grades | Credit |
|----------------|----------|-------------------------------------|--------|--------|
| | H8126x | Small Engine Technology I (Sem. 1) | 9-12 | 1.0 |
| , ; | H7777x | Automotive Basics (Sem. 2) | 9-12 | 1.0 |
| 2 | H8112x | Automotive Technology I | 10-12 | 2.0 |
| , | H8113x | Automotive Technology II | 11-12 | 2.0 |
| 4 | H8114x | Practicum in Transportation Systems | 12 | 2.0 |

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Certification earned: ASE Refrigerant Recovery & Recycling IBC / ASE Entry Level-Auto Maintenance & Light Repair IBC

Diesel, Heavy Equipment Maintenance, & Commercial Drivers Pathway

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|---|----------|---|--------|--------|--|--|--|
| Level | Course # | Course Name | Grades | Credit | | | |
| 1 | H8190x | Occupational Safety & Environmental Tech I (Sem. 1) | 9-12 | 1.0 | | | |
| 1 | H6734x | Principles of Transportation Systems (Sem. 2) | 9-12 | 1.0 | | | |
| 2 | H6774x | Diesel Technology I | 10-12 | 2.0 | | | |
| <u> </u> | H6775x | Diesel Technology II | 11-12 | 2.0 | | | |
| 4 | H8114x | Practicum in Transportation Systems | 12 | 2.0 | | | |



 $\textbf{Certification earned: ASE Refrigerant Recovery \& Recycling IBC / ASE Entry Level-Medium/Heavy, Diesel Engines IBC \\$



iCSI

Institute of Cybersecurity



Institute of Cybersecurity & Innovation Pathway

| Level | Course # | Course Name | Grades | Credit |
|----------|----------|---|--------|--------|
| 1 | H6658 | Computer Maintenance (Cyber 1A) | 9-12 | 1.0 |
| 1 | H6766 | Principles of Cybersecurity (Cyber 1B) | 9-12 | 1.0 |
| <u></u> | H6756 | Networking with Lab (Cyber 2) | 10-12 | 2.0 |
| 3 | H6794 | Cybersecurity Capstone (Cyber 3A) | 11-12 | 2.0 |
| 2 | H6785 | Adv. Cloud Computing (Cyber 3B) | 12 | 2.0 |
| 4 | H6698 | Practicum in Information Tech (Cyber 4) | 12 | 2.0 |

Certification earned: Comp TIA IT Fundamentals IBC / Comp TIA Networking + IBC / Comp TIA Security + IBC / Cisco 200-201 CBROPS IBC