ESSENTIAL REQUIREMENTS FOR THE CONSTRUCTION MANAGEMENT (BCN) PROGRAM

Santa Fe Construction Management graduates are trained for a variety of construction activities including new and renovated construction of residential dwellings, office buildings, retail outlets, hospitals, schools, restaurants, and other structures that require construction managers. The program includes classroom instruction and also many hands-on activities that reinforce the technical curriculum taught in the classroom. Essential requirements have been developed to help students understand the minimum essential mental, physical, and behavioral skills necessary for participation in and completion of all aspects of our curriculum. Construction students will be expected to meet the following essential requirements in order to enter the program.

Section 1. Essential Thinking Skills for Construction Students

The Construction student must be able to apply proper principles and techniques to construction projects. Skills include being able to:

- Read textbooks, handouts, and safety procedures.
- Read blueprints and construction plans.
- Interpret symbols, legends, and other information on construction drawings.
- Extract information from a set of construction drawings.
- Do mathematical calculations.
- Take accurate measurements and do conversions.
- Estimate the amount of materials and labor needed for a project.
- Visualize two and three-dimensional objects.

Section 2. Essential Sensory & Observation Skills for Construction Students

The Construction student must be able to assess the quality of construction work. Skills include being able to:

- Determine readings on devices such as tape measures, framing and adjustable squares, and builders' levels and transits.
- Select proper tools and materials for specific purposes.
- Use sensory cues to do proper constructing, installing, and finishing work.
- Judge distance and space relationships of objects.
- Detect changes in tone or sound of power equipment and warning tones such as an equipment back-up warning alarm.

Section 3. Essential Motor Skills for Construction Students

The Construction student must possess sufficient physical strength, stamina, flexibility, and dexterity to do carpentry and construction work. Skills include being able to:

- Operate necessary tools and equipment properly with good manual dexterity.
- Do physical labor for prolonged periods.
- Work at varying heights and climb ladders, scaffolding, etc.
- Lift and transport equipment and materials as necessary.

Section 4. Essential Communication Skills for Construction Students

The Construction student must be able to communicate effectively and to gather and convey information. Skills include being able to:

- Obtain necessary information from oral and written sources.
- Communicate orally with a person 20 feet away.
- Express information coherently.
- Document work accurately.

Section 5. Essential Behavioral Skills for Construction Students

The Construction student must be able to behave appropriately and safely in a shared learning environment. Skills include being able to:

- Work independently with periodic supervision.
- Work cooperatively with partners and groups.
- Follow through with individual and shared responsibilities.
- Manage the use of time and organize work in order to complete multiple tasks and responsibilities within realistic constraints.
- Be flexible and creative and adapt to professional and technical change.
- Recognize potentially hazardous materials, equipment, and situations and work safely in order to minimize risk of injury to self and nearby individuals.
- Exercise good judgment.
- Adhere to all course policies and procedures as outlined in the course syllabus.
- Adhere to all college policies and procedures as outlined in the student handbook.

Section 6. Essential Environmental Skills for Construction Students

The Construction student must be able to function safely in a shop environment. Skills include being able to work for prolonged periods amidst:

- Extreme noise.
- Sharp tools and materials.
- Electrical equipment.
- Chemicals and toxins.
- Dust, heat, and fumes.
- Machinery with moving parts.
- Moving objects and vehicles.
- Slippery or uneven surfaces