

AFSC 62E4, Staff
AFSC 62E3*, Qualified
AFSC 62E1*, Entry

★DEVELOPMENTAL ENGINEER
(Changed 31 Oct 23)

1. Specialty Summary. Plans, organizes, manages, and implements systems engineering processes to assure required capability delivery over the life cycle of Air Force systems. Included are accomplishing specialized engineering processes and sub-processes; formulating engineering policy and procedures; and coordinating and directing engineering and technical management activities and operations necessary for system conception, development, production, verification, deployment, sustainment, operations, support, training, and disposal. This includes technical management associated with the requirements definition, design, manufacturing and quality, test, support engineering and technologies, modifications, spares acquisition, technical orders, mission critical computer resources, support equipment, and specialized engineering. Related DoD Occupational Group: 240400. (See individual suffixes for specific engineering occupational codes.)

2. Duties and Responsibilities:

- 2.1. Accomplishes systems engineering processes and sub-processes. Performs systems planning activities associated with design, development, manufacturing, sustainment, and modification of systems to satisfy customer requirements. Identifies and transitions new technologies in systems and subsystems. Prepares, evaluates, and implements methods, processes, and techniques that support system design to improve performance, reliability, and maintainability for systems development and modification programs. Conducts design studies and manages studies contracted to industries. Participates in formulating program documentation and progress assessments for all phases of the acquisition process. Provides technical consultation.
- 2.2. Coordinates engineering and technical management activities. Advises management and staff on operations, current and revised policies and procedures, and new business practices. Coordinates with other functional activities to accomplish advance planning and to ensure process integration is accomplished, accurate, and understood. Maintains engineering and technical management liaison with contractors, Air Force field organizations, Army, Navy, Foreign Military Sales, and other governmental agencies.
- 2.3. Formulates engineering and technical management policies and procedures. Continuously analyzes technical policies and procedures, products, and services to improve customer support. Establishes policies and procedures based on improved processes, methods, and sound business practices.
- 2.4. Plans, organizes, and directs engineering and technical management operations. Plans, schedules, and allocates work. Maintains workflow data to meet deadlines and established priorities. Analyzes Air Force requirements to determine if existing technical related infrastructure is capable of meeting customer needs. Directs personnel performing development and sustainment functions.

3. ★Specialty Qualifications:

- 3.1. Knowledge. Knowledge is mandatory of the Air Force systems engineering process, including development, test, and engineering policies, procedures, and management practices.
- 3.2. Education. For entry education requirements see [Appendix A, 62E CIP Education Matrix](#).
 - 3.2.1. 62E4. Undergraduate academic specialization or advanced degree in engineering unless member possesses a fully qualified AFSC in a suffix of this specialty.
 - 3.2.2. 62E1X. Undergraduate engineering degree in the specialization identified by the suffix except shredouts F, and G.
 - 3.2.3. 62E1F. Completion of the Air Force Flight Test Engineer Course or comparable US Navy or foreign flight test engineer course.
 - 3.2.4. 62E1G. Undergraduate academic specialization in engineering.
- 3.3. Training. The following training is mandatory for award of the AFSC indicated:
 - 3.3.1. 62E3X. Completion of Air Force Institute of Technology (AFIT) School of Systems and Logistics Fundamentals of Acquisition Management (FAM 104) course and Defense Acquisition University (DAU) Fundamentals of Systems Acquisition Management (ACQ 1010) course is mandatory. Prior to 31 October 2009, officers were required to have completed AETC's Acquisition Fundamentals course (L30QR63A1), AFIT's FAM 101, FAM 102, FAM 103, or DAU's ACQ 101.
 - 3.3.2. 62E3F. Completion of Air Force Institute of Technology (AFIT) School of Systems and Logistics Fundamentals of Acquisition Management (FAM 104) course and Defense Acquisition University (DAU) Fundamentals of Systems Acquisition Management (ACQ 101) course is mandatory. Prior to 31 October 2009, officers were required to have completed AETC's Acquisition Fundamentals course (L30QR63A1), AFIT's FAM 101, FAM 102, FAM 103, or DAU's ACQ 101. In addition, completion of the Air Force Flight Test Engineer Course or comparable US Navy or foreign flight test engineer course. For reserve officers, the FAM 104 requirement only applies to officers in the rank of O-1 to O-4.
- 3.4. Experience. The following experience is mandatory for award of the AFSC indicated:
 - 3.4.1. 62E3F. A minimum of 6 months of experience as a flight test engineer defined as 6 months of service in a 62E3F position.
 - 3.4.2. 62E3X. A minimum of 24 months of experience is mandatory for upgrade to fully qualified in the specialty suffix. It is mandatory that experience include assignments in such activities as research, development, design, and technical writing in the suffix specialization. A master's degree in the specialization may be substituted for 12 of the required 24 months experience. A Doctor of Philosophy degree in the suffix specialization fulfills the 24-month requirement.
 - 3.4.3. ★ 62E3F. For entry into this specialty, physical qualification for a Flying Class III physical according to AFI 48-123, Medical Examinations and Standards.

3.5. ★(USSF Only) For award and retention of these AFSCs specialty requires routine access to Tier 5(T5) information, systems or similar classified environments and completion of a current T5 Investigation IAW DoDM 5200.02_AFMAN 16-1405, Air Force Personnel Security Program. Note: Award of the entry level without a completed T5 Investigation is authorized provided an interim Top Secret security clearance has been granted according to DoDM 5200.02_AFMAN 16-1405.

4. *Specialty Shredouts:

<i>Suffix</i>	<i>Portion of AFS to Which Related</i>
A	Aeronautical (DoD Occ Code: 240400)
B	Astronautical (DoD Occ Code: 240400)
C	Computer Systems (DoD Occ Code: 240200)
E	Electrical/Electronic (DoD Occ Code: 240200)
F	Flight Test (DoD Occ Code: 240400)
G	Project (DoD Occ Code: 251200)
H	Mechanical (DoD Occ Code: 240400)
I	Systems/Industrial/Human Factors