IHS Knowledge Collections

**Discipline and Subject
Areas of Coverage**

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IHS Knowledge Collections brings together the most trusted and authoritative technical reference content with powerful search tools to help engineers quickly find solutions to technical challenges. By using the Knowledge Collections, engineers make better decisions faster, with engineering productivity increases of up to 30% or more, resulting in better product or project outcomes and reduced risk of failures.

The 10,000+ engineering and technical titles in the Knowledge Collections are distributed among 19 Discipline Collections and approximately 140 Subject Area collections. (

- **Discipline Collections** provide comprehensive reference information related to a broad topic or industry, such as Aerospace Engineering, Biomedical Engineering, Chemistry and Chemical Engineering, Civil Engineering, and so forth.

- **Subject Area Collections** provide more granular coverage of a specific theme, such as Aerodynamics, Aerospace Engines and Propulsion Systems, Aerostructures, and so forth.

By grouping Knowledge Collections content into the Discipline and Subject Area Collections, IHS customers can intuitively select the content that best aligns with the reference content requirements of their engineers, researchers and scientists; aligns with their budget; and complements their current Standards subscriptions.

- For example, a major Aerospace manufacturer might require subscriptions to the Aerospace Engineering, Electrical Engineering, Mechanical Engineering, and Metallurgy and Materials Science Discipline Collections.

- However, a small or mid-market supplier providing avionics components to that same Aerospace manufacturer might require subscriptions to the Avionics and Radar, Electrical Equipment, and Electronic Devices Subject Area Collections.

Customers subscribing to Discipline and/or Subject Area Collections will be able to use the Knowledge Collections search capability, powered by IHS Goldfire, to search book content, as well as Standards content within IHS Standards Expert.

The full list of Discipline and Subject Area Collections, with PCNs, follows:

Aerospace Engineering Discipline (EK001**)**
- Aerodynamics (EK002)
- Aerospace Engines and Propulsion Systems (EK003)
- Aerospace Systems Engineering (EK004)
- Aerostructures (EK005)
- Aircraft Stability and Control (EK009)
- Avionics and Radar (EK010)
- Materials for Aerospace Construction (EK011)
- General Aerospace Engineering (EK012)

Automotive Engineering Discipline (EK157**)**

Biomedical Engineering Discipline (EK013**)**
- Bioimaging and biomedical optics (EK014)
- Biological Engineering (EK015)
- Biomaterials (EK016)
- Biomechanics and biotransport (EK017)
- Nanobiotechnology (EK018)
- General Biomedical Engineering (EK019)

Chemistry and Chemical Engineering Discipline (EK020**)**
- Analytical Techniques (EK021)
- Biochemistry, Biochemical and Biomolecular Engineering (EK022)
- Catalysis and Reaction Engineering (EK023)
- Coatings (EK024)
- Environmental Chemistry (EK025)
- Equipment for the Chemical Industry (EK026)
- Fluid Dynamics (EK027)
- Heat and Mass Transfer (EK028)
- Inorganic Chemistry (EK030)
- Membrane and Separation Technology (EK031)
- Organic Chemistry (EK032)
- Pharmaceuticals and Medicinal Chemistry (EK033)
- Physical Chemistry (EK034)
- Plastics, Polymers and Elastomers (EK035)
- Process Control and Systems (EK036)
- Thermodynamics (EK037)
- General Chemistry and Chemical Engineering References (EK038)

Civil Engineering Discipline (EK039**)**
- Airport Engineering (EK041)
- Architectural Engineering (EK040)
- Construction Management (EK042)
- Construction Materials (EK043)
- Facility and Maintenance Engineering (EK045)
- Geotechnical Engineering (EK046)
- Green Building and Sustainability Engineering (EK044)
- Structural Engineering (EK047)
- Water Supply and Sewage Systems (EK048)
- General Civil Engineering References (EK049)

Computer Engineering Discipline (EK050**)**
- Digital Communications and Networking (EK052)
- Embedded Systems and Programming (EK053)
- General Computer Engineering (EK054)

Earth Sciences Discipline (EK082**)**
- Atmospheric Sciences (EK083)
- Geology (EK084)
- Geophysics and Geochemistry (EK085)
- Hydrogeology and Oceanography (EK086)
- Minerals and Natural Resources (EK087)
- Sedimentology and Soil Sciences (EK088)
- General Earth Sciences (EK089)

Electrical Engineering Discipline (EK055**)**
- Alternative and Sustainable Energy (EK056)
- Electrical Equipment (EK057)
- Electrical Power Generation (EK058)

- Electrical Safety (EK059)
- Nuclear Engineering (EK060)
- Power Electronics (EK062)
- Power Transmission and Distribution (EK061)
- General Electrical Engineering References (EK063)

Electronics Engineering Discipline (EK064**)**
- Communications Engineering (EK072)
- Controls and Control Theory (EK065)
- Electromagnetics (EK066)
- Electronic Devices (EK067)
- Nanotechnology (EK069)
- Optics and Photonics (EK070)
- Semiconductor and Electronic Component Manufacturing (EK068)
- Sensors, Instrumentation and Measurement (EK074)
- Signal Processing (EK071)
- VLSI and Circuits: Embedded/Hardware Systems (EK073)
- General Electronic Engineering (EK075)

Engineering Management Discipline (EK076**)**
- Business Ethics (EK077)
- Decision Making, Leadership & Organizational Behavior (EK079)
- General Engineering Management (EK081)

Environmental Engineering Discipline (EK090**)**
- Air Pollution Control (EK091)
- Environmental Engineering (EK092)
- Environmental Regulation and Compliance (EK093)
- Remediation and Brownfield Development (EK094)
- Waste Management (EK095)
- Wastewater and Process Water (EK096)
- Water Quality and Treatment (EK097)
- General Environmental Engineering (EK098)

Industrial Engineering Discipline (EK105**)**
- Industrial Engineering, Systems Engineering, and Operations Research (EK106)
- Mathematics and Statistics (EK107)
- Project Management (EK108)
- Quality Control and Reliability Engineering (EK109)
- Six Sigma and Lean Management (EK110)
- General Industrial Engineering (EK111)

Industrial Safety Discipline (EK141**)**
- Fire Protection and Safety (EK142)
- Hazardous Materials Safety (EK143)
- Occupational Safety and Industrial Hygiene (EK144)
- Process Safety (EK145)
- Security and Surveillance (EK146)
- General Industrial Safety (EK147)

Life Sciences Discipline (EK159**)**
- Agricultural Sciences (EK160)
- Animal Sciences (EK161)
- Cancer (EK162)
- Cosmetics and Dermatology (EK163)
- Obstetrics and Gynecology (EK168)
- Pathology (EK164)
- Pharmacology (EK165)
- Psychiatry and Neurology (EK166)
- Respiratory and Cardiovascular Health (EK167)
- General Life Sciences (EK169)

Mechanical Engineering Discipline (EK112**)**
- Automation (EK113)
- Engineering and Product Design (EK114)
- Fluid Mechanics and Heat Transfer (EK115)
- Heating, Ventilation, Air-Conditioning & Refrigeration (EK116)
- Manufacturing Engineering (EK117)
- Mechanics (EK118)
- Mechatronics and Robotics (EK119)
- Shock, Vibration and Acoustics (EK120)
- Strength of Materials (EK121)
- Tribology (EK123)
- General Mechanical Engineering (EK124)

Metallurgy and Materials Science Discipline (EK125**)**
- Extraction and Production (EK126)
- Functional Materials (EK127)
- Materials Analysis, Modeling and Design (EK130)
- Materials Processing and Manufacturing (EK128)
- Materials Testing and Characterization (EK129)
- Polymers, Composites and Specialty Materials (EK131)
- General Metallurgy and Materials Science (EK132)

Oil and Gas Engineering Discipline (EK133**)**
- Corrosion Control and Antifouling (oil and gas) (EK134)
- Environment, Health and Safety (oil and gas) (EK135)
- Exploration and Production (EK136)
- Petrochemicals and Petroleum Products (EK137)
- Pipelines, Transport and Storage (EK138)
- Refining and Processing (EK139)
- General Oil and Gas Engineering (EK140)

Software Engineering Discipline (EK148**)**
- Embedded Software Development (EK149)
- IT Project and Process Management and Governance (EK150)
- Mobile and Web Applications (EK151)
- Operating Systems (EK152)
- Programming Languages (EK153)
- Software Frameworks (EK154)
- Software Testing (EK155)
- General Software Engineering (EK156)