EFSP Auxiliary ESL Curriculum

Engineering English Jargon Quick Reference

Field-specific terms, contrast pairs, and high-pressure sentence frames

Audience: mechanical, electrical, civil, systems, industrial, test, quality, manufacturing, and field engineers, plus engineering managers and technical project leads

Focus: An engineering English curriculum for requirements, design reviews, tradeoffs, testing, failure analysis, quality, safety factors, manufacturability, field issues, and technical disagreement.

Designed for advanced ESL learners who already use professional English and need industry-specific terminology, realistic meetings, role-play pressure, careful pushback, and polished workplace outputs.

Teaching stance: this is language and workplace-communication training, not legal, medical, financial, safety, or regulatory advice. Instructors should connect every scenario to the learner's current company policies, local rules, and approved procedures.

Nomenclature and Jargon

These are classroom working definitions. Learners should adapt wording to their organization's policies, systems, and local regulatory environment.

Requirements and Constraints

Term	Working meaning
requirement	Working engineering term used in requirements and constraints; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
constraint	Working engineering term used in requirements and constraints; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
tolerance	Working engineering term used in requirements and constraints; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
tradeoff	Working engineering term used in requirements and constraints; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Design Reviews and Technical Pushback

Term	Working meaning
design review	Working engineering term used in design reviews and technical pushback; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
design rationale	Working engineering term used in design reviews and technical pushback; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
risk	Working engineering term used in design reviews and technical pushback; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
verification	Working engineering term used in design reviews and technical pushback; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Failure Modes and Reliability

Term	Working meaning
failure mode	Working engineering term used in failure modes and reliability; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
FMEA	Working engineering term used in failure modes and reliability; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
reliability	Working engineering term used in failure modes and reliability; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
duty cycle	Working engineering term used in failure modes and reliability; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Testing, Validation, and Data Interpretation

Term	Working meaning
prototype	Working engineering term used in testing, validation, and data interpretation; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
acceptance criteria	Working engineering term used in testing, validation, and data interpretation; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Term	Working meaning
validation	Working engineering term used in testing, validation, and data interpretation; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
sample size	Working engineering term used in testing, validation, and data interpretation; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Manufacturability and Cost Engineering

Term	Working meaning
DFM	Working engineering term used in manufacturability and cost engineering; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
tooling	Working engineering term used in manufacturability and cost engineering; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
yield	Working engineering term used in manufacturability and cost engineering; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
cycle time	Working engineering term used in manufacturability and cost engineering; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Safety Factors and Compliance

Term	Working meaning
safety factor	Working engineering term used in safety factors and compliance; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
code compliance	Working engineering term used in safety factors and compliance; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
margin	Working engineering term used in safety factors and compliance; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
liability	Working engineering term used in safety factors and compliance; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Field Issues and Customer Communication

Term	Working meaning
field failure	Working engineering term used in field issues and customer communication; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
warranty	Working engineering term used in field issues and customer communication; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
corrective action	Action taken to fix a current problem and prevent recurrence.
installation condition	Working engineering term used in field issues and customer communication; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Systems Integration and Interface Control

Term	Working meaning
interface control	Working engineering term used in systems integration and interface control; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
integration	Working engineering term used in systems integration and interface control; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Term	Working meaning
regression test	Working engineering term used in systems integration and interface control; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
configuration management	Working engineering term used in systems integration and interface control; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Industry-Specific Meeting Moves

Situation	Useful language
Requirements and Constraints	Before we commit, I want to confirm requirement, constraint, the owner, and the evidence behind the decision. If load, tolerance, material, manufacturability, regulatory, and cost constraints conflict., I recommend we document the risk and agree on the next step.
Design Reviews and Technical Pushback	Before we commit, I want to confirm design review, design rationale, the owner, and the evidence behind the decision. If design rationale, risk, analysis, and verification evidence should be reviewed., I recommend we document the risk and agree on the next step.
Failure Modes and Reliability	Before we commit, I want to confirm failure mode, FMEA, the owner, and the evidence behind the decision. If operating envelope, duty cycle, failure mode, and reliability target matter., I recommend we document the risk and agree on the next step.
Testing, Validation, and Data Interpretation	Before we commit, I want to confirm prototype, acceptance criteria, the owner, and the evidence behind the decision. If test conditions, sample size, acceptance criteria, and failure analysis are incomplete., I recommend we document the risk and agree on the next step.
Manufacturability and Cost Engineering	Before we commit, I want to confirm DFM, tooling, the owner, and the evidence behind the decision. If yield, tooling, cycle time, supplier capability, and cost must be balanced., I recommend we document the risk and agree on the next step.
Safety Factors and Compliance	Before we commit, I want to confirm safety factor, code compliance, the owner, and the evidence behind the decision. If safety factor, code requirements, test evidence, and liability exposure need review., I recommend we document the risk and agree on the next step.
Field Issues and Customer Communication	Before we commit, I want to confirm field failure, warranty, the owner, and the evidence behind the decision. If evidence, installation conditions, warranty terms, and corrective action are not complete., I recommend we document the risk and agree on the next step.
Systems Integration and Interface Control	Before we commit, I want to confirm interface control, integration, the owner, and the evidence behind the decision. If interfaces, timing assumptions, version control, and regression testing need governance., I recommend we document the risk and agree on the next step.

High-pressure pushback frames

- I understand the urgency. The risk is that we move faster than the evidence or process supports.
- I am not blocking the goal. I am naming the condition we need before the decision is safe and credible.
- If we accept this risk, we should name the owner, document the assumption, and define the trigger for escalation.
- That may be possible, but not under the current scope, timeline, or approval path.
- Let's separate what we know, what we assume, and what still needs confirmation.

Contrast Pairs

Do not confuse	Useful distinction
requirement vs tradeoff	In requirements and constraints, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.

Do not confuse	Useful distinction
design review vs verification	In design reviews and technical pushback, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
failure mode vs duty cycle	In failure modes and reliability, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
prototype vs sample size	In testing, validation, and data interpretation, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
DFM vs cycle time	In manufacturability and cost engineering, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
safety factor vs liability	In safety factors and compliance, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
field failure vs installation condition	In field issues and customer communication, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.
interface control vs configuration management	In systems integration and interface control, define whether the discussion is about the current fact pattern, the controlling process, the stakeholder pressure, or the final decision.