



IRC §41—CREDIT FOR INCREASING RESEARCH ACTIVITIES

The R&D tax credit is a dollar for dollar credit against taxes. It is largely determined by **Qualified Research Expenses (QREs)** which are associated with **Qualified Research Activities (QRAs)**, per the 4-part test below. These expenses are typically the following:

- **Wages** – W-2 Box 1, for employees which participate in QRAs
- **Supplies** – Tangible and used up in the QRAs
- **Contract Research** – Expenses to contractors which perform research on your behalf, where you carry the financial risk and obtain rights of any discoveries

ACTIVITIES TYPICALLY QUALIFY WHEN THEY MEET THE FOLLOWING **4-PART TEST**:

1. **TECHNOLOGICAL IN NATURE**—ACTIVITIES MUST RELY UPON THE “HARD” SCIENCES:

- Engineering
- Mathematics
- Chemistry
- Physics
- Computer Science
- Biology

2. **PERMITTED PURPOSE**—ACTIVITIES MUST BE INTENDED TO *DEVELOP A NEW OR IMPROVE UPON AN EXISTING BUSINESS COMPONENT*:

BUSINESS COMPONENTS

- Product
- Process
- Formula
- Invention
- Technique
- Software

IMPROVEMENTS

- Quality
- Performance
- Functionality
- Reliability
- Cost

3. **TECHNICAL UNCERTAINTY**—ACTIVITIES MUST DEMONSTRATE ATTEMPTS TO ELIMINATE TECHNICAL UNCERTAINTIES BY *DISCOVERING INFORMATION* RELATING TO:

- **Capability:** Can this business component be developed?
- **Methodology:** How can/should this business component be developed?
- **Design:** What is the appropriate design of the business component?

4. **PROCESS OF EXPERIMENTATION**—ACTIVITIES MUST DEMONSTRATE ALTERNATIVES HAVE BEEN EVALUATED AND *SUBSTANTIAL EXPERIMENTATION* HAS TAKEN PLACE:

- Modeling
- White-boarding
- Simulation
- Hypothesis Testing
- Trial and Error
- Prototypes

Non-Qualified Activities:

- Research conducted outside the U.S.
- Routine data collection
- Reverse engineering
- Efficiency surveys, management functions, or market research
- Research after commercial production
- Routine quality control, ordinary testing or inspection
- Research related to taste, style, or aesthetics
- Adaptation of an existing business component for a particular customer